Report of
The Royal Commission on
Violence in the
Communications Industry

Volume

5

Learning
from
the Media

The Royal Commission on Violence in the
Communications Industry was established by Order in
Council in May 1975 and published an Interim Report
in January 1976. It held hearings throughout the
Province of Ontario from October 1975 to May 1976.

A selection of public briefs, reports of foreign
consultations and the conclusions and
recommendations of The Royal Commission on
Violence in the Communications Industry are
published in Volume I, which is available in French
and in English.

The Commission's Bibliography comprises Volume II.

Twenty-eight independent studies of the media were
undertaken for The Commission and are contained in
Volumes III to VII.

Order-in-Council

Order-in-Council approved by Her Honour the Lieutenant Governor, dated the 7th day of May, A.D. 1975.

Upon the recommendation of the Honourable the Premier, the Committee in Council advise that pursuant to the provisions of The Public Inquiries Act, 1971, S.O. 1971, Chapter 49, a Commission be issued appointing

The Honourable Julia Verlyn LaMarsh, P.C., Q.C., LL.D.,
Judge Lucien Arthur Beaulieu, and
Scott Alexander Young,

and naming the said Julia Verlyn LaMarsh as Chairman thereof, to study the possible harm to the public interest of the increasing exploitation of violence in the communications industry; and that the Commission be empowered and instructed:

1. to study the effects on society of the increasing exhibition of violence in the communications industry;

2. to determine if there is any connection or a cause and effect relationship between this phenomenon and the incidence of violent crime in society;

3. to hold public hearings to enable groups and organizations, individual citizens and representatives of the industry to make known their views on the subject;

4. to make appropriate recommendations, if warranted, on any measures that should be taken by the Government of Ontario, by other levels of Government, by the general public and by the industry.

The Committee further advise that pursuant to the said Public Inquiries Act, the said Commissioners shall have the power of summoning any person and requiring such person to give evidence on oath and to produce such documents and things as the Commissioners deem requisite for the full investigation of the matters to be examined.

And the Committee further advise that all Government ministries, boards, agencies and committees shall assist, to the fullest extent, the said Commissioners who, in order to carry out their duties and functions, shall have the power and authority to engage such staff, secretarial and otherwise, and technical advisers as they deem proper, at rates of remuneration and reimbursement to be approved by the Management Board of Cabinet.

The Royal Commission on Violence in the Communications Industry

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* 1975
**1976

Contents of Volumes

*Ce volume est publié également en français.

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Issue 1:

How much violence is shown on television, and who actually watches it?

How Much Television is Watched?

Recent research into Canada's viewing habits make clear that we watch a great volume of television. In addition, studies done in the United States in the last several years probably give a good estimate of Canadians' viewing habits as well – especially for those areas where American programming is received directly or via cable.[1] The results of various investigations of television consumption can be put in a number of ways, for example:

- Both children and adults see, on the average, over three hours of television daily.[2]
- Almost every family has at least one television set.[3]
- The television is turned on for about six hours per day in the average household.[1]
- About 40 per cent of all leisure time is spent with television. Television ranks third (behind sleep and work) as a consumer of time.[4]
- Children begin watching television on a regular basis three or four years before entering Grade One and most children watch television every day.[5]

Of course there is variability in television watching. Some children see as much as five or six hours of television each school day, while others are not allowed to watch at all on school days.[6] There tends to be heavier viewing in children from poorer families[7] and children with lower IQ and academic achievement.[8] Children tend to watch more television as they grow older, until adolescence when there is a temporary drop.[9] Young children do most of their watching in the morning or afternoon, but older children are more likely to be watching in the evening, even as late as 11:00 p.m.[10]

How Much Violence is Shown?

The volume of violence shown on entertainment television is very great, although the exact figures vary somewhat depending on the working definition of violence.[11] George Gerbner, Dean of the Annenberg School of Communications, has systematically analyzed the level of violence in American television programs since 1967.[12] The Royal Commission on Violence in the

Communications Industry has commissioned a study to develop Canadian measures of media violence and related conflicts and relationships. The definition of violence used in Gerbner's analysis is 'the overt expression of physical force against self or other, compelling action against one's own will or pain of being hurt or killed, or actually hurting or killing." The term 'program' in this research refers to 'single fictional stories presented in dramatic form' and this includes television dramas, feature films, and cartoon programs. Some of his findings are instructive, for example:

- There is no significant drop in the overall level of violence shown on entertainment television since 1967. And the level of violence shown in the 1960s was up sharply from the level in the 1950s.[13]
- Eight out of ten programs (and nine out of every ten weekend children's hour programs) contain violence.
- Between six and seven out of every ten leading characters are involved in violence. For children's programming, the figure is between eight and nine out of every ten characters.
- Recent declines in violence shown in the 'family hour' have been more than offset by increases in violence shown in the late evening and 'children's hours' (weekend daytime).

In summary it can be said that North American television viewers, including children, are exposed to an enormous amount of television violence. In 1968 the National Association for Better Radio and Television estimated that between the ages of five and fifteen, the average child would see the violent destruction of more than 13,400 characters on television;[14] since then, no one has seriously disputed the accuracy of this estimate.

Do children learn new forms of aggression merely by watching the kind of violence shown on television?

Children learn by watching. When children watch violence on television, then they learn violence. The teaching potential of the medium has led some critics to speak of television as a 'school for violence'[1] and as a 'preparatory school for delinquency'.[2] A number of well-publicized incidents seem to support these views. For example, there was the case of a seven-year-old in Los Angeles who was caught sprinkling ground glass into the family meal. He had seen it shown on television and was trying it out for himself.[3] There are many additional documented examples of direct imitation of television by children.[4] But perhaps these are unusual cases. Perhaps these are disturbed children living in extreme circumstances. Research psychologists have recently been concerned with the possibility that normal children under more ordinary conditions may also learn new techniques of aggression by seeing examples in the media.

A dramatic series of experiments by Albert Bandura and his co-workers[5] has demonstrated how quickly and completely children can learn new forms of aggression. Nursery-school children, both boys and girls, watched an adult perform a series of novel aggressive actions. The adult punched a large inflated doll in the face, kicked the doll, and struck it in the face with a hammer. In addition, the actor made a variety of aggressive verbal comments such as 'pow . . . kick him . . . socko." Following this, the children were subjected to a mild frustration – they were first given some attractive toys to play with, and then the toys were arbitrarily taken away. Each child was then allowed to play for twenty minutes in a room containing, among other things, the inflated doll that the actor had previously attacked. During this period, observers kept a record of the child's imitative aggression (including kicking or punching the figure, or striking it in the face with a hammer). These children, particularly the boys, showed a strong tendency to imitate the aggressive acts that they had just seen. Another group of children (exposed to similar frustration) who did not watch any aggression were also allowed to play in the same room, but they exhibited very little aggression.

These results have been obtained in a large number of similar experiments. In part, these experiments show what parents have known for a long time – children can learn new behaviours simply by observation. But the experiment also shows that this applies to complicated aggressive acts shown briefly for only one time. It is reasonable to conclude that novel techniques of aggression such as "kung-fu" kicks, karate chops, or knife throwing may also be learned by ordinary young children merely by observing these actions demonstrated on television.

Children may learn new techniques of aggression from television, but can they remember these for any appreciable length of time? The results of several controlled studies show that they can.[6] Children in these experiments were shown films of actors performing a number of aggressive actions, and then the children were observed in a free play situation. Again, as in Bandura's experiment, the children imitated a large proportion of the aggression that they had seen. These children were tested again after a delay of six to eight months without any further exposure to the film. After this length of time the children still produced over 40 per cent of the aggressive acts that they had seen. Some subsequent research[7] with British children has shown that under a variety of circumstances an even higher proportion is retained.

The evidence on this point is clear; children can and do learn the mechanics of novel forms of aggression simply by observation. Moreover, these techniques are remembered for a long time. But will children actually perform the novel kinds of aggression that are learned from television? The actual carrying out of aggressive acts learned through observation appears to depend on a number of circumstances. Aggressive imitation has been found to be more probable in boys than in girls,[8] and in two studies,[9] working-class boys showed higher aggressive imitation than did middle-class boys. A number of researchers[10] have found that it is those children who are particularly aggressive in everyday life that are the most likely to be influenced by aggression shown on television. The realism of the observed aggression also appears to be a factor. The more realistic the portrayal, the more likely it will be

imitated.[11] Cartoon characters, for example, although they may show extreme aggression, are less likely to be imitated than lifelike characters.[12] In general, imitative aggression is more likely when the viewers are in a situation that is similar to the scene of the observed aggression.[13]

The social context in which television is watched can influence the imitation of aggression. Children's everyday exposure to violence in the media frequently occurs when the child is with others – often older children or adults. The attitudes expressed by these other people has been found to be an important factor determining the child's later imitation of observed aggression. For example, researchers[14] have had individual children watch a televised aggressive model while in the presence of an adult who appeared to be involved in the program. The adult spontaneously made a variety of enthusiastic comments ("Boy, look at him go" . . . "He sure is a tough guy") for some children, and sharply negative comments ("He shouldn't do that" . . . "That's awful") for other children. The effect of these evaluative comments appeared when the subjects were later put into the test situation along with an adult. Here, the children who had heard the positive comments showed a high level of imitative aggression, while those who heard the negative comments showed much less aggression.

Not surprisingly, a major factor influencing the child's imitation of an actor's aggression is the conse-quences that this aggression is seen to have. An early experiment[15] approached this question directly by showing a televised model being either lavishly rewarded or harshly punished for his aggression. Subjects in two control groups saw either a non-ag-gressive model or no model at all. Later the subjects who had seen the aggression being rewarded showed a good deal more imitative aggression than did the children in the other groups. Another study[16] also showed aggressive actors who were again either rewarded or punished for their behavior. In comparison with a control group that saw the actor neither rewarded nor punished, the children who saw the punishment were later much less aggressive. The control group was almost as aggressive as the model-rewarded group, however. This suggests that children may be almost as likely to imitate an aggressive character who "gets away with it" as they are an actor who is explicitly rewarded for his aggression.

Putting these studies into some kind of perspective, the imitation of observed aggression may be seen as part of the child's strategy in reaching his goals – the obtaining of rewards, and the avoiding of punishments. It is the observed sequence of events that teaches him a "lesson" about the use of aggression as an effective means of achieving his goals.

What, then, is the relation between the use of violent methods and successful goal achievement as typically portrayed in the same medium? A detailed thematic analysis of the content of popular television programs conducted by Larsen[17] showed two things. First, violent methods are the single most popular means employed by television characters to reach their goals. And second, that socially disapproved methods are more frequently portrayed as being successful than are approved methods. Moreover, these relations were found to be particulary strong for programming directed specifically toward children. Putting these two lines of research together, it is possible to conclude that young viewers are routinely being given the message that *aggression works*. They are being taught that aggression is a highly effective means of achieving one's goals even though it may be socially disapproved. And thus the perceived effectiveness of aggressive actions may further encourage young viewers actually to use some of the techniques of aggression that they have seen on television.

Of course, television is only one of many factors that influence children's behaviour. It is obvious that not every child becomes aggressive every time a violent program is seen. But this is not really the point. The problem that concerns both parents and psychologists is the likelihood that demonstrations of violence on television serve to increase the *overall level* of aggressive attitudes and behaviours in children's lives.

Issue 3:

Does television violence affect everyone the same way? Or are different groups affected differently?

No one really believes that all television violence always causes all children to become violent. The serious concern is that watching *some* forms of television violence will cause *some* children under *some* circumstances to become more violent than they would be otherwise.

It is clear that children can and do learn techniques of aggression by watching television,[2] and they may also be prompted to carry out these aggressive acts upon either inanimate targets or human victims.[2] Of course, not all children are affected in the same way or to the same degree. The actual carrying out of aggressive acts learned through observation appears to depend on a number of factors. For example, aggressive imitation has sometimes been found to be more probable for boys than for girls.[3] Two British studies,[4] have shown that working-class boys are particularly vulnerable to the effects of observed aggression in comparison with middle class boys. A number of researchers[5] have found that those children who are particularly aggressive in everyday life are the ones most likely to be influenced by aggression shown on television.

Young children are particularly vulnerable to the effects of television violence owing to their inability to comprehend the motivation or the consequences of the violence that they see.[6] Young children are likely to imitate aggressive acts seen on television even when they have been told that these acts are wrong or "naughty."[7] For older children, a parent's warnings can be effective in limiting aggressive imitation, but only when an adult is later present to supervise the child's behaviour.[8]

Retarded children may be especially prone to modelling their behaviour after aggressive television characters.[9] Retarded children have been shown to learn and copy the aggressive actions seen on television and to behave more aggressively with their playmates after watching aggressive actors. With retarded children, aggressive behaviours are much more likely to be imitated than nonaggressive, "pro-social" behaviours,[10]

Evidence like this can be read two ways. A relatively comforting interpretation is that television violence has a seriously adverse effect on just a limited proportion of children. On the other hand, a man who has conducted a good deal of research on the topic has concluded that: "Perhaps a more defensible conclusion would be that there is a small subgroup of habitually passive and unaggressive children who will *not* be stimulated to perform aggressively regardless of what they see on television."[11] This is certainly a much less comforting interpretation.

Issue 4:

Can television violence "trigger off" aggressive attacks?

Several years ago, the passengers on a Boeing 707 jetliner were quietly watching an in-flight film as their plane began its ascent over the Rocky Mountains. The film they were watching was *A Twist of Sand*, an exciting and violent war story. During the film, the stewardess noticed that one of the passengers, a 24-year-old man listed as Jerry Joseph Deutchman, was "starting to act funny." As he became increasingly violent the plane's captain was called from the cockpit. When the uniformed captain approached, the agitated passenger attacked him. In the melee that followed, at least five passengers were involved in the fight to subdue Deutchman. Finally, after an unscheduled landing, he was removed from the plane by Government officials. During his arraignment, Deutchman explained that he had started fighting because of the fighting that he had watched in the war movie.[1]

This is just one of a large number of well-documented instances where violence in films and television has apparently triggered off criminal actions and violent attacks.[2] Sceptics, however, quite rightly point out that this kind of anecdotal evidence does not prove that the violence shown in films and television is an important contributor to aggression in society. In the airplane incident, the passenger may have been distraught or mentally unstable to begin with. Other examples may also have involved unusual individuals or extreme circumstances. In recent years, research psychologists have been concerned with the possibility that the kind of violence shown in the entertainment media may also stimulate aggressiveness in ordinary people under more normal circumstances.

The earliest systematic research on this issue was conducted in Canada by Richard Walters[3] and his associates at the University of Waterloo. Their strategy was to create a controlled situation where aggressiveness, the willingness to inflict pain, could be measured objectively following the exposure of subjects to either an aggressive film or to a nonaggressive control film. The entire procedure was disguised as a "study of learning based on punishment" in order to keep subjects from suspecting the actual purpose of the study. Since their basic experiment has subsequently

been repeated many times in research done in Europe and the United States, it is worthwhile to go into some of the details of their research procedure. In one study,[4] the subjects (adult men) were led to believe that they were participating in an experiment on the effects of punishment in association learning. The subjects administered punishing electric shocks to a learner every time the learner made an association error. The errors were signalled on a display board in front of the subject, and the signals were secretly programmed so that 15 out of the 30 trials were registered as errors. After each "error," the subject selected one of the eleven intensity levels of the electric shock used as punishment. Following an initial series of 30 trials, half of the subjects saw a film clip from a commercial movie showing two teenage boys engaged in a vicious knife fight. The remaining subjects saw the nonaggressive control film dealing with art work. Everyone was then given a second series of 30 trials in which they again punished the learner's errors with electric shocks. Analysis of the pre-film to post-film changes in the average intensity of shocks showed that the group given the aggressive film had shifted to a significantly higher punishment level than had the control group. Aggression scores based on shock duration showed a similar outcome. Walters and Thomas[5] have used this same experimental paradigm with a number of different subject populations, and have consistently found the same pattern of results with groups of teenagers, male adults, and female adults.

In these studies, and in over twenty subsequent replications and extensions conducted by researchers in Europe and in the United States over the past fifteen years, the results have been the same; exposure to film and television violence produces increased aggressiveness.[6] Some of these controlled laboratory studies have demonstrated that there are particular circumstances under which filmed violence is especially likely to facilitate aggressive behaviour. The emotional state of the viewer is one such factor, and the dramatic context of the observed violence is another.

A number of experiments[7] have found that angered viewers are particularly affected by watching violence.

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When subjects were angered by insults or by unfair judgments they retaliated with more shocks, but when this occurred in combination with a violent film, the shocks were greatly increased. One interpretation of these findings is that anger by itself increases the desire to be aggressive and then watching violence serves to lower the inhibitions against expressing this aggression.

Another likely factor influencing inhibitions is whether or not the observed violence is perceived as being warranted or justified within the fictional context in which it occurs. In one of several experiments that have investigated this point,[8] subjects were either angered or not angered and were then shown a boxing film that was given in one of two alternative versions. In one version, the boxer was represented as being a villainous character well deserving of the beating he received (justified version). Alternatively, he was represented as the victim of unfortunate circumstances, and an admirable, generally sympathetic character (unjustified version). In terms of both the number and the duration of shocks, the higher level of aggression was obtained from angered subjects who had been given the justified film version.

Another recent study[9] was designed to examine more closely some of the factors that define the justification of violence. College students in a learning experiment were first angered when they received an unfairly large number of electric shocks from someone posing as a fellow-subject. Following the presentation of the fight film, the situation was reversed and subjects were given an opportunity to give shocks to him as punishment for his errors on the learning task. The experimental variations in this study centred on the type of introduction provided for the film sequence. Four conditions were formed by the combination of the presence or absence of two different types of justification for aggression. In one condition, the justification was based on the *vengeance* motive – the eventual victor was seen as avenging an unfair beating that he had previously received. Justification in a second condition was based on the *self-defence* motive with the victor portrayed as defending himself in a "kill or be killed" situation. A third condition was formed by a combination of these two motives, and a fourth condition served as a control group with no mention of any justifying circumstances. The results, in terms of the number and duration of shocks given, showed the lowest level of post-film aggression in the condition where no justification was provided. Subjects in the *vengeance* justification condition gave more shocks than did subjects given either the neutral introduction or the *self-defence* justification. One interpretation of these results stresses the degree of similarity between the situation of the subject and aggressive actor. In the two conditions that included the *vengeance* justification, the subject, who had himself been unfairly abused by the confederate, may have been influenced by motives similar to those portrayed in the film. This correspondence, of course, would be absent on the other two conditions. Thus, the

inhibiting or facilitating effects of filmed aggression may depend in part on the similarity of the context of the film and the viewer's perception of his own situation.

The findings of these various studies are generally consistent with the idea that inhibition of aggression results when an angered viewer watches violence in a context where the violence is not justified. On the other hand, the aggression-stimulating effects have been most evident when violence is seen in a justified context. This last point is particularly ironic in light of television programming policies. In showing that "crime does not pay" by depicting the hero's successful and justified use of violence against the "bad guys," the producers may be creating the very conditions that are most likely to trigger aggressive responses in the viewers.

Anecdotal examples of film and television violence appear to be well supported by the results of these experimental studies. However, sceptics have still raised questions about the generalizability of laboratory findings to real-life situations. Perhaps electric shocks as they are given in these experiments are not an appropriate measure of aggression.[10] Or perhaps the artificial setting of the laboratory situation invalidates any generalizations to the real world.[11] Some of these sorts of objections can be answered, but the committed sceptic will probably remain unconvinced.

The inherent limitations of laboratory research have led a number of researchers to conduct "field experiments" on film and television violence effects. Two such experiments[12] have produced inconclusive results.[13] A third experiment,[14] conducted with a small number of children who were observed in their normal setting, found a significant increase in inter-personal aggression in some of the children exposed to violent television programs.

The most convincing evidence thus far comes from three naturalistic field experiments,[15] two of them conducted in the United States and one in Europe. In these studies, groups of adolescent delinquents were shown commercial films for five successive nights as part of their normal activities. For some of the groups, the selected films were highly violent. For the other groups the films were uniformly nonviolent. The results showed that the boys who saw the violent films later engaged in higher real-life aggression than did the boys who saw the nonviolent films. Here again the results support the conclusion that media violence increases the aggressive behaviour of the viewers.

Anecdotal evidence, laboratory findings, and the results of field experiments converge on the same conclusion: observed violence produces heightened aggressiveness. It is not yet possible to make precise estimates of the overall impact on society of the kind of violence routinely shown in the entertainment media. However, even if aggressive attacks are triggered off in only a small proportion of the viewers, when as many as 40,000,000 people watch a brutal scene of television violence, we can be sure that people will be hurt as a result.

Does television violence result in the blunting of emotional reactions to observed violence? Does television violence produce an insensitivity to violence in real life?

Canadian viewers are exposed to an enormous amount of television violence.[1] This has caused many parents to be concerned that television violence may increase the level of real-life violence that their children encounter in everday life. And there seems to be substantial research evidence to support this concern.[2]

But there is another concern as well. Perhaps the abundance of violence and brutality in the mass media has the effect of blunting the emotional sensitivity of the viewers, both children and adults. There is observational data and physiological evidence that both children and adults are normally made anxious or affected emotionally when they see unusual violence in the media.[3] But what happens when scenes of violence are repeated again and again? A general principle of psychology is that when an emotional response is repeatedly provoked, there is a progressive decrease in the strength of the emotional response. Habituation is the technical term that has been given for this process of emotional blunting. For example, in one early study,[4] adults saw a victim receive an extended series of electrical shocks. The strength of the observers' galvanic skin response (a measure of emotional impact) was high at first, but typically the emotional response declined with each successive shock. This habituation process occurred even when the victim was seen to jerk convulsively with each shock. Several other studies[5] have measured physiological responses of adult observers watching a film dealing with a primitive tribal ritual called subincision. A series of different victims were shown, each one subjected to a bloody and painful genital mutilation. Again the process of habituation was apparent. The emotional responses showed a marked decrease following the first episode and additional habituation occurred with each succeeding scene of violence. Additional laboratory experiments have demonstrated habituation to repeated showings of films of industrial accidents and scenes of military atrocities.[6] From these studies it is reasonable to conclude that television viewers will become progressively less emotionally responsive to repeated observation of scenes of violence shown on televison.

In fact, a recent experiment has confirmed that a blunting of emotional responses does occur in children exposed to high levels of television violence.[7] This study compared the emotional responses of children who were habitual television watchers with the emotional responses of children who had little exposure to television and television violence. Individual children in both these groups were shown several brief films including a comedy film, a film about skiing, and a violent sequence from a commercial film about boxing. Physiological measures of emotional arousal were taken as the children watched the film. The results showed relatively little difference between the two groups in their emotional reaction to the nonviolent portions of the films. For the violent portions of the films, however, there was much less emotional response from the boys with high exposure to television. Apparently they had seen so much television that they were no longer sensitive to the kind of violence that is routinely shown on entertainment television.

One possible implication of these findings is that if children become habituated to violence on television then they may become more accepting of violence when it occurs in real-life, face-to-face situations. Normally, children do not tolerate aggression very comfortably, either in themselves or in others.[8] One might say that normal children typically have an aversion to serious physical aggression. It may be, however, that constant exposure to violence on television has the effect of "curing" this aversion in children who are heavy television watchers. Some related research seems to support this possibility.[9] Children with an aversion to dogs were shown a number of films of dogs and children playing with dogs over a period of time. These children, who had originally been very frightened of dogs, became, after watching the films, much less fearful of the dogs. In some cases, after repeated exposure, they became willing to touch the dogs or actually play with the dogs. The concern here is that children who see large amounts of television violence may be "cured" of their aversion to violence in the same way that the children were cured of their aversion to dogs. Certainly there is evidence that children who watch a great deal of television violence later turn out to be more aggressive

adolescents, but the process through which this comes about is not certain.[10]

A recent series of laboratory experiments[11] indicates that exposure to television violence can increase ordinary children's toleration of real-life aggression. In these studies boys and girls from Grade Three and Grade Four were taken individually to a game room where half of them were shown a particularly violent portion from a cowboy movie, while the other half played with toys without seeing any film. The experimenter then asked each child individually to watch over some young playmates in a room nearby. They could be seen through a television monitor. The child was told to call for help if anything seemed to be going wrong. For the first minute or so, the two playmates could be seen on the monitor quietly playing with blocks. (Actually, unknown to the child, this was shown from a standardized videotape.) After this the playmates could be seen arguing, then fighting with one another, pushing and shoving until it appeared that real harm was being done. The experimenter measured how long it took for each child to go for help. The children who had previously seen the violent film appeared to be relatively indifferent to the fighting going on next door. They took significantly longer on the average to go for help than did the children who had not watched the film. This experiment has been repeated with older children and with different types of aggressive films shown over television. The results have consistently confirmed the finding of the original study, strongly suggesting that continued exposure to television may cause children to become more passive and accepting of aggression when it actually occurs in real life.

Issue 6:

What about "catharsis"? Can an angry person "get it out of his system" by watching violence on television?

The myth of "vicarious aggression catharsis" continues to crop up in discussions of television violence effects.[1] The basic idea is that an angry person's aggressiveness may be somehow "drained off" by watching violence. The purpose here is to point out that the whole idea of vicarious aggression catharsis stems from a misunderstanding of Aristotle's original concept of catharsis. A further purpose is to point out that both common sense and a large body of research evidence stand in direct contradiction to the notion of "vicarious aggression catharsis."

Catharsis of Grief or Sorrow

Aristotle used the word catharsis in connnection with the "tragic" feelings of sorrow and anguish.[2] He pointed out that when people are feeling depressed, they are often strongly affected by seeing a tragic play. During the performance, their feelings of sadness may be intensified even to the point of weeping or crying. But after the play is over these feelings are greatly reduced. Thus vicarious tragic experience can serve to "drain off" the tragic feelings. Of course, the process of catharsis can be described in more modern terms. When people are feeling "blue," seeing a good "tearjerker" may afford them some relief – they feel better after having a good cry.

Note that Aristotle's original term "catharsis" referred only to the draining off of *tragic feelings*. It did not apply to feelings of aggression. Only recently has anyone suggested that catharsis might also occur with emotions other than the tragic feelings of sorrow and pity.

Vicarious Catharsis of Hunger or Lust?

How well does the catharsis notion apply to other motives and emotions? Not very well. Take the example of a person feeling the pangs of hunger. A concept of "vicarious hunger catharsis" would suppose that feelings of hunger could be somehow drained off by watching someone eat a delicious meal. On common-sense grounds this certainly does not seem very plausible. Nor does the idea of "vicarious lust catharsis." Common sense does not suggest that feelings

of sexual arousal will be reduced just by viewing explicitly erotic material. Common sense and research argue against the likelihood of both of these forms of vicarious catharsis, and common sense alone should make us sceptical of the notion of vicarious aggression catharsis. Why should we suppose that watching scenes of brutality and violence will serve to drain away feelings of hostility or aggression? We should require strong evidence before accepting such a strange idea.

Research Findings

The evidence in fact does not support the idea of vicarious aggression catharsis. On the contrary, carefully controlled laboratory studies have consistently shown that the observation of violence serves to *increase* subsequent aggressiveness.

The early research on this issue was conducted in Canada by Professor Richard Walters[3] and his co-workers at the University of Waterloo. Their approach was straightforward. They arranged a situation where aggressiveness, defined as the willingness to inflict pain, could be measured objectively following the exposure of subjects to either an aggressive film or a nonaggressive control film. As described above, the entire procedure was disguised as a "study of learning based on punishment" in order to keep subjects from suspecting the actual purpose of the study. Some of the details of their research procedure should be given because their method has served as a prototype for a great deal of the subsequent research conducted in Europe and in the United States. In one study,[4] the subjects (adult men) were led to believe that they were participating in a study of the effects of punishment on association learning, and were asked to administer punishing electric shocks to a learner every time the learner made an association error. The errors were signalled on a display board in front of the subject, and the signals were secretly preprogrammed so that 15 out of the 30 trials were registered as errors. After each "error," the subject was to select one of the eleven intensity levels of the electric shock used as punishment. Following an initial series of 30 trials, subjects saw a film clip from a commercial movie showing two teenage boys engaged

in a vicious knife fight. The remaining subjects saw the nonaggressive control film dealing with art work. Everyone was then given a second series of 30 trials in which they again punished the learner's errors with electric shocks. Analysis of the pre-film to post-film changes in the average intensity of shocks showed that the group given the aggressive film had shifted to a significantly higher punishment level than the control group. Aggression scores based on shock duration showed a similar outcome. Additional research,[5] has used this same experimental paradigm with a number of different subject populations, and has consistently found the same pattern of results with groups of teenagers, male adults, and female adults.

In these studies and in over twenty subsequent replications and extensions conducted by researchers in Europe and in the United States over the past fifteen years, the results have been the same; exposure to film or televison violence more often produces an increase than a decrease in later aggressiveness.[6] Obviously these results do not support the idea of vicarious aggression catharsis. In fact they directly contradict it. Even those who argue for some possible positive effects from television violence no longer subscribe to the vicarious aggression catharsis notion.[7]

Vicarious Catharsis: Sorrow In Contrast With Aggression

There is of course a crucial difference between sorrow and aggression with respect to the concept of vicarious catharsis. Performance of a tragedy in the ancient theatres of Greece or in modern-day films or television can serve to stimulate or trigger off actual weeping or crying in the viewer – the overt expression of the aroused feelings. Observed violence may similarly arouse feelings of aggressiveness, but these feelings *cannot* be given immediate expression either in the theatre or the home. These feelings must be inhibited, "bottled up," until they subside or until an acceptable or available target can be found.

Catharsis as described by Aristotle is possible because grief and sorrow can be given immediate expression. But this is not so with aggression. Lack of attention to this crucial difference has helped to perpetuate the myth of vicarious aggression catharsis in the face of common sense and research evidence.

Discarding the Myth

The myth of vicarious aggression catharsis has been persistent. (The apologists for television violence have of course promoted the myth wherever possible.) The time has come to discard the myth. The idea of vicarious aggression catharsis does not come from Aristotle, it runs counter to common sense, and it is contradicted by a large body of research. And, more importantly, this persistent myth contributes continuing confusion to the serious and difficult issues of evaluating the benefits and costs of violence in the media and its regulations.

Issue 7:

Are there positive effects of television violence?

The benefits and potential benefits of television as a whole are very great. But the benefits of one aspect of the medium, television violence, are much less evident. And those positive effects that have sometimes been claimed for television violence bear close examination.

Letting Off Steam?

It is sometimes claimed that angry people can "let off steam" by watching violence on television. Unfortunately there is very little evidence that this is true.[1] The results of a good deal of psychological research give support to exactly the *opposite* view – angry persons tend to become more aggressive after watching violent material.[2] The aggression-stimulating effects of observed violence have been found in closely controlled laboratory studies,[3] and the same effects have also been obtained in several naturalistic field studies with violent films of the type often seen on television.[4] The old idea that television violence helps to "let off steam" is a favourite of the television promoters; unfortunately the idea itself does not seem to "hold water."

Learning that Crime Does not Pay?

Another virtue often claimed for television violence is that it teaches the lesson that "crime does not pay." This claim is somewhat difficult to assess, but there are a number of reasons for being sceptical. The "crime does not pay" theme is often obscured by other more immediate themes. A detailed analysis[5] of the content of popular television programs of the 1960s showed that violence was the single most popular means employed by all characters to reach their goals, and that socially disapproved methods, particularly violence, were more frequently portrayed as being successful than were socially approved methods. Putting it more simply, the television message is that "violence does pay." We should also remember that children, especially young children, may easily misunderstand even the simplest television plot.[6] Children are likely to comprehend aggression and its immediate effectiveness but not the full complex motives and consequences surrounding aggressive action.[7] When the story is interrupted by commercials, even Grade Three children are unlikely to grasp the "crime does not pay" theme.

The heroes and lawmen of the television drama use violence with relative impunity[8] even though they may themselves be in clear violation of the law.[9] Some researchers have suggested that the actions of the aggressive hero serve to teach children that it is all right to be brutal as long as you are a "good guy."[10] And what child does not think of himself as a good guy?

Entertainment Value and Relief From Boredom

Clearly, television has great entertainment value; it is an important source of relaxation and enjoyment for an enormous number of people. But, as every viewer can testify, television programs can also be very boring. The reason for this is not difficult to understand; North American television audiences consume enormous amounts of fresh television material every day. Program producers are hard pressed to produce consistently new and interesting material; the available creative talent and the available money are simply no match for the appetite of the viewing public. Producers are often stuck with poor scripts for programs that must be made in a hurry. The result is programs that follow a well-worn formula; programs are stereotyped, predictable, and, in a word, dull. Producers are thus faced with the problem of how to spice up dull scripts. One easy and relatively inexpensive solution to the problem is to include generous amounts of violence. Where the story line is dull or confused, or where the action is too slow, audience interest can be revived with a fist-fight, a shoot-out, or a wild car chase written into the script.[11] Thus violence can be used to maintain audience size, program ratings, and, ultimately, advertising revenue. The inclusion of violent material in this process is not an artistic decision, but it is part of a production formula geared ultimately to generating profit.[12]

In this sense television violence is of great value and benefit – to televison program producers. But what is its social value? If the quick and easy use of cliché violence were less available, better, more ingenious, more creative television programming might be produced more often.

Is it particularly harmful for blood, pain, and death to be shown on television?

Horror and violence are certainly not the same thing, and yet they are sometimes confused. Violence is shown on Canadian entertainment television in great quantities – beatings, stabbings, and shootings are a prominent feature of most "action" programmes.[1] Horror is much more rarely shown. Horror in this context refers to the normal *aftermath* of violence – blood, injury, pain, and suffering. George Gerbner,[2] who has conducted a number of systematic studies of the content of television programs, notes that television violence stuns or kills without much visible hurt – suffering is difficult to detect, making violence appear painless.

Under public pressure, the television industry has periodically promised to clean up television violence. Instead of reducing violent content, however, television producers have moved to "pretty-up" the ugly aftermath of violence. For example, a leading radio and television trade magazine[3] quoted one television producer as saying, "Anything that shows too much agony, too much punishment, or is too bloody, anything that could be too startling, whether it is in context or whether it was done for good and valid reasons, is being taken out or reduced wherever possible."

The meaning of violence has been systematically falsified. Violence has been made to appear more acceptable by the elimination of its grotesque and horrific aspects. This is objectionable in itself, and it is all the more objectionable when this is offered as a response to public concern over the impact of the violence shown in entertainment television.

There is an additional ironic aspect to this practice of deleting the horrific aspects of violence. It may be that when television violence is shown the injuries should also be shown – in bloody and horrible detail. There is, to begin with, a good deal of research evidence indicating that the kind of violence shown on televison has the effect of increasing aggressiveness in many persons.[4] Ironically, this aggressiveness may be greatest when the bloody and horrible consequences of violence are down-played. The results of several research studies clearly suggest that, watching scenes of violence,

viewers are more aggressive when images of blood, pain, or horror have been eliminated.

An experiment conducted by Donald Hartman[5] at Stanford University involved teenaged juvenile delinquents who were shown a film centring on a basketball game. The film was prepared in several versions. In one version the game was interrupted by a rather one-sided fist-fight that focused on the attack, showing punching fists, kicks, and angry faces and voices. Another version showed the same fight but focused on the plight of the victim with close-ups of the pain on his face as he was knocked down groaning and crying. After seeing one or the other of these versions, each boy was given the chance, as part of a learning task, to give electric shocks to another boy. For the subjects who were not insulted or otherwise angered by the other boy, the greatest aggression in terms of the shocks given came from those who saw the attack version. Significantly less aggression was shown by the boys who had seen the version stressing the pain and suffering of the victim.

Similar results have been obtained in a study of college students.[6] These subjects were initially angered when they received an unfairly large number of shocks as a judgment of their own task performance in an experiment in education. Each subject then saw a film of a highly aggressive boxing match with several different taped endings. One ending stressed a *positive outcome* with the boxer leaving the ring in good physical condition and later going on to a life of success and fame. An alternative ending depicted a highly *negative outcome* with stress on the defeated boxer's injuries, a cerebral hemorrhage, extreme agony, and painful death. After the film, the subjects were themselves put in the position of giving shocks to another person. The number of shocks they administered was significantly less following exposure to the *negative outcome* version.

The horror that results from violence seems to have a sobering effect. The excitement and aggression-stimulating effects of showing aggressive attacks may be at least partly counteracted by showing the realistic consequences of aggression as well. Of course, television viewers might be discomforted if the consequences of violence were realistically portrayed. These viewers

might complain, and program producers want very much to avoid complaints. So an ingenious though cynical solution was put forth. Striking a virtuous pose, the producers promised to "clean up" television violence. Then, without noticeably reducing the rate of shootings, stabbings, and other acts of mayhem, they systematically cut out scenes showing blood or pain. They "cleaned up" television violence by prettying up, or entirely omitting, the real consequences of violence. Ironically in doing this they may have created the very conditions that are most likely to have harmful social consequences.

Issue 9:

When parents and children are watching television together, can parents' reactions and comments influence the impact of television violence on the children?

Many parents are concerned that their children may be influenced by the violence shown so abundantly on television. In fact, there is a good deal of research evidence to support this concern. Children do learn new forms of aggression by seeing them performed on television.[1] Their actual aggressive behaviour may also be increased.[2] In addition, children's feelings and attitudes about aggression may be largely shaped by the violence that they see on television.[3]

What can parents do about this? One thing they can do is simply turn off the television set or refuse to allow their children to watch objectionable programs. This solution may be easy in theory, but it is very difficult in practice – as almost every parent knows. In fact, some recent research in the United States has shown that it is principally the children who control the family television set, and it is the parents who often ask their children for advice on program selection.[4] Even in households where parents retain some measure of control over the choice of programs, children are still likely to see a good deal of violence simply because such a large proportion of entertainment television contains violent action.[5]

An alternative parental approach has been suggested. While watching television with the children, it is possible for parents to take a highly active role in interpreting, evaluating, and commenting on the action shown on the program. While this may be taxing for adults and while it may interfere with the adults' own enjoyment of the program, there is some limited research evidence that this kind of active interpretation and evaluation of the television material can modify the impact that it has on young viewers. One controlled experiment[6] investigated this possibility by having children watch a televised aggressive actor while the children were in the presence of an adult. The adult appeared to be involved in the program and spontaneously made a variety of positive evaluative comments ("Boy look at him go" . . . "He sure is a tough guy") for one set of subjects, and a number of negative comments ("He shouldn't do that" . . . "That's awful") for another group. In a control group, the adult simply remained silent. The effect of these evaluative comments appeared

later when the subjects were put into the test situation that was similar to the situation shown on television. Under the watchful eye of the adult, those children who had heard the positive comments showed a high level of imitative aggression, while those who heard the negative comments showed a reduced level of aggression in comparison with the children in the control condition. Children in three additional conditions were treated in the same way (either positive comments, negative comments, or no comments at all) but they were later put into the test situation by themselves. Interestingly, this variation caused the condition differences to be washed out. Thus, the adult comments proved effective, but only when children were later under the surveillance of this same adult. In a similar experiment[7] an adult provided more explicit verbal prohibitions against specific aggressive acts shown in a film. These prohibitions later served to inhibit the children's aggressive behaviour both in the presence of the same adult who had made the comments and in the presence of a different adult.

Another study[8] along these same lines has been carried out by Dr. Joan Grusec at the University of Toronto. She had five-year-olds and ten-year-olds individually watch a film of an aggressive female actor while an adult made either positive comments, negative comments, or neutral comments. Later, the children were observed while they were left alone in a situation that contained a number of the same props that had been shown in the film. Still later, the children saw the film again and their spontaneous remarks were recorded. For the older children, the adult's comments seemed to have some effect – there was less imitative aggression following the negative commentary. For the five-year-olds, however, the aggressive actions were imitated regardless of the adult's comments. Another surprising finding was that the younger children in the negative comments condition imitated the aggressive actions they had seen and, at the same time, imitated the adult's negative remarks. There was no relationship between their physical behaviour and their verbal expressions as they imitated the criticisms of the very same aggressive acts that they copied.

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These experiments provide only limited encour-
agement for adults who would like to mediate the
impact of television violence by giving simultaneous
commentary and evaluation to their children. Such
commentary may have value for older children or
children under close supervision. But for younger
children, and for children without constant supervision,
parental evaluation and commentary may be largely
irrelevant.

Issue 10:

Does cartoon violence have different effects from realistic television violence?

Animated cartoons are a central feature of television programming directed toward children, and these cartoons are heavily saturated with violent action. A recent survey[1] of the content of children's television indicates that one-half to two-thirds of all cartoons involve violent action, making weekend children's programming the single most violent form of television available. Moreover some critics have argued that exposure to violent cartoons is an important contributor to aggressiveness in children.[2] However, for the most part, the available research evidence does not seem to bear out this concern. Cartoons have not been found to produce imitative aggression.

Some early research examined the effects of violent cartoons on the behaviour of nursery school children. One investigator, Alberta Siegel,[3] approached the question straightforwardly. She showed highly violent animated cartoon films to young children who watched in pairs. After the films, the children were allowed to play by themselves for about 15 minutes while they were being secretly observed through a one-way mirror. These children proved to be no more aggressive in their play than an equivalent group of children exposed to nonaggressive films. Another, more closely controlled study, has also been done with nursery school children. Half these children were individually shown a violent cartoon and half were shown a non-aggressive film. Each child was then given a "Punch and Judy" toy to play with. Pushing a lever on the toy caused one doll to hit the other doll over the head while simultaneously making an automatic record of that response. Contrary to the expectations of the experimenter, there was very little evidence that the cartoons increased the amount that this hitting response was chosen. A similar study,[4] also using a rather artificial measure of aggression, arrived at the same conclusion: no increase in aggression following violent cartoons.

Some more recent research confirms these findings. One study[5] looked at the behaviour of pairs of Grade Two children after they had seen either an aggressive cartoon, a non-aggressive cartoon, or no cartoon at all. There were no significant differences in the subsequent aggressive behaviours (pushing or fighting) of the children in these three experimental conditions. Another study[6] along these same lines had 180 public school children randomly assigned to one of three experimental groups in which they saw either a real-life aggressive film, an aggressive cartoon, or a nonaggressive film. Here again the violent cartoon failed to affect aggressive behaviour. The children who had seen the violent cartoon subsequently showed no more verbal or physical aggression than did the children who saw the nonviolent control film.

These results stand in marked contrast to experiments in which children have been shown films or television programs of live actors behaving aggressively.[7] This kind of material has repeatedly been shown to cause children to behave more aggressively toward human victims[8] as well as inanimate targets.[9] Why the difference? Why does realistic violence produce imitative aggression while cartoon violence does not?

One possible explanation is that imitative aggression may be highly "cue-specific."[10] In films using live actors, the perceptual cues (such as the shape and colour of clothing, weapons, furniture, et cetera) are very similar to the cues encountered in the test situations following the film. The fantasy figures and settings in cartoon films, on the other hand, are qualitatively very different from those encountered later. Another experiment[11] was recently conducted specifically to examine this possibility. In this study, the level of cue similarity between the observed violence and the later situation was systematically varied. Subsequent aggression of Grade Three children was increased in the condition where the similarity was high, but not when the cue similarity was low.

Children may be excited by violent cartoons, but their later behaviour does not appear to be much affected. If we lived in a *Roadrunner* world of cliffs and giant boulders, with stylized dynamite bombs, sledgehammers, and bear traps, the situation might be different. But as it is, the gap between the fantasy world of cartoon violence and the ordinary world of everyday life is probably too great for cartoon violence to have much effect on our children's behaviour.

Issue 11:

Does violence shown on television distort viewers' beliefs about violence in the real world?

Television Distorts Reality

The "uncertain mirror"[1] of television gives a weirdly distorted reflection of reality. Several[2] researchers have taken count of the kinds of characters that populate the world of entertainment television. Over three-quarters of that strange world is populated by young, North American, middle-class unmarried males. Children and old people account for only about ten per cent of the total population. When women are shown they usually occupy family roles, and in comparison to men, they are shown as being warmer and more sociable but less rational.[3]

The violence that is shown on television is also distorted. For example, in real life violence most often stems from close personal relationships.[4]. But on television violence is usually done by strangers.[5]. The crimes shown on television almost always involve violence, while in real life most crimes involve money or property and no violence at all.[6] About one-fifth of the characters in television drama are law officers and they act violently in about two-thirds of their appearances.[7] On the other hand, in real life police rarely, if ever, even draw their guns. Homicide is the most frequent television crime, but in real life homicide accounts for only a fraction of one per cent of actual crime.

But Who Believes It?

The world of television may show a grotesquely distorted version of the real world, but who really believes it?

Children do. Young children especially learn about the outside world primarily through televison – a fact that Canadian parents are quite well aware of.[8] In a survey study,[9] about half of the Grade One children interviewed said that the people on television were like everyday people. Some older children also believed that television characters and real people are alike most of the time. Even children in Grades Four and Five are often uncertain about the reality of what they see on entertainment television.[10] Almost half of the teenagers in a recent report indicated that crime programs "tell about life the way it really is."[11] Various studies have found that confusion between television fiction and

reality is especially high among children who are more aggressive, and generally deviant,[12] and children from poor families or minority groups.[13]

Clearly a large proportion of children frequently confuse television and reality. How about adults? A single example is sufficient to demonstrate that many adults are capable of the same confusion. The popular televison program *Marcus Welby, M.D.* features Robert Young in the role of Dr. Welby. In the first five years of that program "Dr. Welby" has received over a quarter million letters from American and Canadian viewers, most of them asking for medical advice.[14]

And What Does It Matter?

Who cares if television distorts our perception of reality? Children may sometimes be amazed to find that Native People don't all live like "TV Indians." And, likewise, adults may be surprised to meet a real police detective who turns out to be a very ordinary person. But there is little harm in this.

Some more sinister results of television distortion have recently been uncovered by George Gerbner, Dean of the Annenberg School of Communication.[14] He and his co-workers have shown that heavy television users tend to develop a generally fearful and suspicious view of the world. Heavy television users are most likely to overestimate the proportion of people involved in law enforcement (reflecting television's version of reality). Similarly, heavy viewers tend to believe that most people cannot be trusted. The most striking evidence for the effects of television distortion comes from viewers who were asked to estimate their own chances of being involved in violence during any given week. Heavy television viewers were a good deal more likely to overestimate this possibility than were light viewers. Moreover, the exaggerated fear in heavy television users was held regardless of the age, sex, or education of the viewer.

Television, fear, and suspicion seem to go together. The obvious explanation for this is that the abundance of crime and violence shown on entertainment television causes people to be afraid. Of course this is not the only interpretation. It might be that especially

apprehensive and mistrustful people spend more time in the relative safety of their homes, and thus watch more television than the average. This interpretation suggests that fear causes heavy television viewing. Perhaps the most plausible interpretation is that causation operates in both directions, creating a vicious circle.[15] Fear causes people to stay at home and watch television. Then the crime and violence shown on television increases their fear of the outside world. Television leads to fear, and fear leads to increased use of television – the classic self-perpetuating cycle of addiction. There is another disquieting interpretation as well.

Taking a wider view, Dr. Gerbner[14] sees the prevalence of television violence as a means of social control. The public fear and insecurity that are promoted by television violence produce an exaggerated concern for public order and an increasing dependence on the exercise of authoritarian power in our society.

Issue 12:

Does television violence really have the effect of increasing violence in society?

The Evidence

There is evidence from a variety of sources that television violence is a cause of aggressive and criminal behaviour. How conclusive is this evidence? A brief review shows that the evidence comes from four major sources: anecdotal evidence, controlled laboratory studies, naturalistic field studies, and correlational research.

Anecdotal Evidence. There are numerous well-documented instances of crime and violence occurring in everyday life that can be directly traced to the entertainment media.[1] Two examples will suffice. In Los Angeles, a seven-year-old boy was caught in the act of putting ground glass into the lamb stew that was to be the family dinner. The boy explained that he was testing out a technique that he had seen on television.[2] In another case, passengers on a Boeing 707 flight were shown an exciting and violent war film *A Twist of Sand.* During the film, one of the passengers became very agitated. When the pilot was called back to investigate, the passenger attacked him. Fortunately, the plane was able to make an unscheduled landing while the captain and five other passengers subdued the attacker. Following his arrest, he explained that he had started fighting because he had watched everybody fighting in the war movie.[3]

These incidents illustrate two of the major concerns of the critics of television violence; that children may learn new techniques of aggression by seeing them on television, and that media violence may trigger off acts of aggression in adolescents and adults. There are, of course, many additional anecdotal examples along these same lines.

Controlled Laboratory Studies. Anecdotal examples alone cannot prove that media violence is an important contributor to violence in society. It may be that only very unusual individuals are involved in these incidents, or the incidents may occur only under extreme circumstances. Recently, however, research psychologists have made controlled laboratory studies of the effects of media violence on ordinary children and adults under more normal circumstances. The implications of the anecdotal examples appear to be strongly supported by their results.

Dr. Albert Bandura and his co-workers[4] have demonstrated how quickly and completely children can learn new forms of aggression through observation. In a typical demonstration, children are shown on film or television an inflated figure being kicked, punched, hammered, and variously attacked by an adult actor. Afterwards the children are taken individually to a room containing the hammer, the inflated figure, and a one-way observation window through which their behaviour can be observed. There the children typically perform many of the novel aggressive actions that they previously witnessed. Other children, not previously exposed to the aggressive actor, show few of these aggressive behaviours. If nothing else, this kind of experiment shows that children can and do learn novel forms of aggression simply by seeing them on film or television. A variety of additional studies[5] have indicated those circumstances under which the aggressive acts are most likely to be carried out against both inanimate and human targets.[6]

Quite different laboratory procedures have been used to investigate the possibility that media violence may increase aggressiveness in adolescents and adults. In the original studies[7] conducted by Richard Walters and his co-workers at the University of Waterloo, a situation was arranged where subjects' aggressiveness could be measured objectively following their exposure to an aggressive film. In order to keep the subjects from guessing the actual purpose of the study, the procedure was disguised as a "study of learning based on punishment." Some subjects were shown a film of teenagers engaged in a vicious knife fight. Others saw a film on art. All subjects then gave electric shocks to a "learner" as punishment for errors on a learning task. Subjects exposed to the violent film were typically the ones who gave more shocks and stronger shocks. This general procedure, with many variations, has been repeated dozens of times by researchers in the United States and Europe. With great regularity the results have been the same; exposure to film or television violence results in an increase in later aggressiveness.[8]

Naturalistic Field Experiments. Questions may legitimately be raised about the generalizability of these laboratory findings to real-life situations. Some people[9] have questioned the measures of aggression that have been used, and others feel that the artificial setting of the laboratory situation limits any generalization to the real world.[10] Objections of this sort have led a number of researchers to conduct "field experiments" in which media violence effects have been studied in everyday settings. Three such experiments have produced inconclusive results.[11] However, some fairly convincing evidence comes from three other naturalistic field experiments,[12] two of them conducted in the United States and one in Europe. In these studies, groups of adolescent delinquents were shown commercial films for five successive nights as part of their normal activities. For some of the groups, the selected films were highly violent. For the other groups the films were uniformly non-violent. The results showed that the boys who saw the violent films later engaged in sharply higher actual aggression than did the boys who saw the non-violent films. Here again the results support the conclusion that media violence serves to heighten the aggressiveness of the viewers.

Correlational Research. Anecdotal evidence, laboratory findings, and the results of naturalistic field experiments all converge on the same conclusion: media violence increases aggressive behaviour. The same conclusion is supported by several correlational studies as well. Correlational research asks the general question "What goes together with what?"; and in the present case "Does watching television violence in everday life go together with aggressive behaviour in everyday life?" The results of several such correlational studies have shown a significant association between watching violence on television and aggressive behaviour.

In a study[13] of several thousand adolescents, the objectively rated violence level of their favourite television program was found to be associated with the level of the teenagers' criminal and aggressive behaviour. Another study[14] compared the level of exposure to television violence in 1000 nine-, ten-, and 11-year olds with their stated willingness to use violence themselves. The investigators concluded that "The greater the level of exposure to television violence, the more the child was willing to use violence, to suggest it was a solution to conflict, and to perceive it as effective." A number of additional studies along these same lines have reached similar conclusions.[15]

The most elaborate study[15] to date was conducted over a ten-year time-span. The researchers found that preference for television violence was associated with aggressiveness in Grade Three boys. More interestingly, the television violence seen in Grade Three was positively associated with the boys' aggressiveness level when it was measured ten years later. An additional result was that there was no association between Grade Three aggressiveness and later television preferences. This later finding indicates that it is television violence that leads to aggressiveness, and *not* that aggressiveness leads to a preference for television violence.[16]

Summary. The research evidence on the impact of television violence is diverse and it is complex. It is not surprising that the results are also complex. Nor is it surprising that no single conclusion or interpretation of the results is supported by all of the findings. Similarly, the soundness of the particular pieces of research in each of these categories can always be questioned – there is probably not a single research study that is not open to criticism in some respect. Despite this complexity, an overall pattern of results can be identified. First, only a few researchers have suggested that any possible benefits to society might follow from the violence shown on entertainment television. Second, a large number of studies have reported only small or non-significant effects. And third, a still larger number of studies, clearly the majority, have found negative effects resulting from the kind of violence shown on entertainment television.

What Does the Evidence Mean?

Is media violence really an important contributor to aggression in society? A good deal of research evidence indicates that it is. But some critics remain sceptical; they remain unconvinced that media violence is really a serious social problem.[17] Some of the differences between the researchers and their critics are more apparent than real.[18] For example, almost everyone accepts the conclusion that under some circumstances watching violence increases the likelihood of some forms of aggression. On the other hand, almost everyone can agree that media violence is just one of a large number of factors determining the level of aggressiveness and criminal violence in society.

Ultimately, it is a quantitative question: "*How much* aggression and violence in society can be attributed to violence shown in the media?" The controlled experimental studies seem to indicate short-term effects of 20 per cent or more. The correlational research indicates long term effects of ten per cent or less. These quantitative estimates cannot be verified in detail. They are proposed here in order to place the issues in a reasonable perspective. Concerned citizens must recognize that the elimination of brutality and violence from television and other media will not eliminate the major proportion of violent crimes either in the short run or in the long run. On the other hand, the people responsible for producing the high level of violence that is routinely shown in the media, and those people who are unwilling to regulate it, must recognize the likelihood that real people are being hurt every day because of it.

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Television and Pro-Social Behaviour

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Contents

Chapter One

The Importance of Observational Learning In Human Development

People learn by watching others. Indeed, this is one of the most fundamental ways by which people learn new behaviour. By watching others, for example, people who enter new occupations learn skills and attitudes necessary to their new job. Also by watching others, people can learn the complex skills involved in new sports and leisure-time activities. Such learning often involves a great deal of effort and concentration. Other such learning, however, takes place quite automatically. Think of speech as an example. The majority of the words we use are learned without any conscious effort. Simply by observing others, people acquire the vocabulary and many of the rules of grammar that they use. People also acquire their accents and styles of delivery by observing others. Thus whether people use a wide or a more limited range of expressive gestures when they talk will depend to a large extent on the particular models they watched when they were learning the language. A lot of this learning took place without their even being aware of it.

Children are particularly likely to learn by watching others. They are at the most formative period in their lives where they are striving to gain some understanding and mastery of the social world that they inhabit. By watching others and then imitating what they have seen they can learn the "rules" of social behaviour. While adults have very often learned to distinguish between who is appropriate and who is inappropriate to watch and learn from, young children very often have not.

A great deal of research has been carried out on the importance of observational learning. A large amount of this research has been concerned with children's social behaviour. Consider the following study. Children were taken to a playroom and told that they would be able to play with some of the toys there. Some of the children saw that there was already somebody playing in the room. These children had to wait until the other person, an adult, had finished playing before they could have their turn. The children watched while the adult played. The children saw the adult play in a very aggressive way. They watched as he hit a large rubber Bobo doll on the head with a hammer, punched it in the face, kicked it about the room, and threw things

at it, at the same time saying "Pow, right in the nose" or "Bang" every time the doll was hit. Finally the children got their turn to play with the toys. As many parents will perhaps not be surprised to hear, the children were readily influenced by what they had seen. In the situation described above, if the children had seen an adult play aggressively then they too were more likely to beat up and kick the Bobo doll. The children who had not seen an adult play aggressively showed very little inclination to beat up and kick the same Bobo doll. It was clear that most of the aggression shown by the children in this situation had been learned simply by watching what the adult had done. Many experiments such as the one described above have now been carried out. Several of the "classic" studies in this area were carried out by Dr. Albert Bandura [1] and his colleagues at Stanford University. There is little doubt that children can learn aggression by watching others behave aggressively.

It is not only "anti-social" behaviour like aggression that children learn by watching others. They can also learn a whole range of other, more positive, "pro-social" attitudes and behaviours like obedience, self-control, charity, courage, and cooperation. Consider the following experiment. As in the studies on aggression, children were taken to a playroom and told they would be able to play with the toys there, one of which was a bowling game. The children were told that by playing this bowling game they would be able to win tokens which they could exchange for a prize on the basis of the more tokens won, the better the prize. Before being able to play, however, the children had to watch an adult take his or her turn at the game. The children watched while the adult won tokens and then, in one situation, gave away some of his or her tokens to a needy child. The children then had their turn at the game, during which time they were left entirely alone in the room (but watched through a one-way mirror). The question was, would the children donate some of their tokens to the needy child too? The answer was a very clear yes. Dr. Joan Grusec at the University of Toronto has carried out several studies like the one described above. She has found repeatedly that the amount of

sharing children do is strongly influenced by what they see others do.[2, 3, 4] Furthermore, what the children learn they also remember. In one study the children were retested after a delay of four months. Even after that length of time, children were more generous if they had previously seen an adult behave generously in that situation.[5] Dr. Grusec's findings have been replicated by several other investigators, including myself. Working with a sample of British children, I found that children's sharing was influenced in either a generous *or* a selfish direction, depending on how they had seen an adult behave.[6] Furthermore, like the children studied by Dr. Grusec in Toronto, these behaviours persisted over a long period of time. I have recently reviewed elsewhere many similar studies on the development of children's altruistic behaviour.[7] It is quite certain that children can and do learn to share simply by observing others.

In still other research carried out by Dr. Grusec on the social development of children it has been shown that children can also learn self-control and to resist temptation as a result of watching how others behave. In these studies children are typically told not to play with certain attractive and tempting toys that are in a room. Then they are left alone in the room and their behaviour is watched through a one-way mirror. What Dr. Grusec[8] was able to show was that if the children had previously seen others resisting the temptation to touch the attractive toys then they too were better able to resist that same temptation. If, on the other hand, children had previously seen others giving in to the temptation, then they were less able to resist. Children who had not seen a model at all fell at a mid-way point in resisting the temptation. Thus it was quite clear that the children's ability to resist the temptation had been increased or decreased, depending on what the children had seen others doing.

We should not make the mistake of thinking that it is only children whose social behaviour is influenced by watching others. Adults are too. In an experiment carried out at the University of Oxford, I investigated whether adults could be influenced to behave in an altruistic manner as a result of watching someone else do so.[9] In that study, the subject of the experiment accompanied a model along a particular corridor in the Psychology Department. They came across a person wearing a large "Give Blood" badge, who was sitting at a table surrounded by "Give Blood" posters, information pamphlets, and donation forms. Both the subject and the model were approached by this person and given a brief talk on the importance of giving blood. They were then asked if they would volunteer to donate a pint of blood. If the model was asked first and said yes, then fully 67 per cent of the people accompanying the model also said yes when they were asked. If it was the subject that was asked first, however, then only 25 per cent volunteered. In a follow-up of these people, appointment cards were mailed out inviting them along to the Regional Blood Transfusion Centre

to give their blood. On average, six weeks later, 33 per cent of the people who had seen another person *volunteering* to give blood actually donated a pint of blood. None of the people in the other group gave. This study clearly demonstrated that altruism in adults can be reliably increased if those adults see others behaving altruistically.

All of the examples that have been discussed so far have been concerned with concrete social behaviour. However, it is not just specific social behaviours that are learned, parrotlike, by watching others. Rather, it is that people construct principles and "rules" from the behaviour that they see others engage in. Many, many studies have now conclusively demonstrated that such abstract abilities as problem-solving, creative thinking, knowledge of language rules, moral reasoning, and organization in memory can all be effectively learned simply by observing others.[10]

People do not, of course, model themselves after everybody they see. Characteristics of the model are important. Generally, successful people will be learned from rather than unsuccessful, powerful ones rather than non-powerful, similar rather than dissimilar, and nurturant rather than non-nurturant. It depends upon a complex interaction between the type of behaviour being modelled, the situation it is being modelled in, and the type of person the watcher "identifies" with. Generally, as mentioned, models who are seen as successful or as possessing prestige (as seen by the particular individual) are most likely to have influence. One study found, for example, that when a pedestrian had relatively high prestige (by being well dressed in a suit and tie) he was imitated more in crossing the road against a red light, than when he had relatively low prestige (by being poorly dressed in old and patched clothing).[11]

To summarize: Both children and adults learn by watching others. If they watch aggressiveness then they are more likely to behave aggressively. If, on the other hand, they watch others behave in a generous and helpful manner, then they are more likely to behave in a generous and helpful way.

Chapter Two

The Importance of Observational Learning From Television

One of the important implications of the fact that people learn by watching others concerns television. Ever since television first appeared on the scene considerable research interest has been focused on this form of entertainment. The earliest, and classic, study was carried out by Himmelweit, Oppenheim, and Vince at the London School of Economics, in England.[1] Their focus, along with other early studies, centred more on the effects of television *per se* than the effects of specific content. If, however, one of the main ways in which people learn is by observing others then people should also learn a great deal from viewing others on television.

Television provides people with access to a very wide range of observational learning experiences. By simply sitting in front of their television sets in their own living-rooms, people can observe a vast array of other people behaving in response to a variety of situations that may be either novel or familiar to the observer. In this way people can often learn about things beyond their own direct experience. This becomes a matter of rather grave concern when we realize how most of the characters on television behave. A very great deal of television portrays characters, for example, who use violence in order to solve their problems.[2] Indeed, television often dramatizes situations in which violence is the only solution that is shown to work. Therefore it follows that television may well inadvertently teach people, and particularly children, to solve *their* problems by the use of violence. The research relating to this issue is voluminous and it is not my intention to review it yet again here. The reader is instead referred to the discussions and reviews by, among others, Bandura,[3] Goranson,[4,5] Liebert, Neale, and Davidson[6] Murray,[7] Stein and Friedrich,[8] and the five volumes of technical reports to the Surgeon General of the United States.[9] The weight of this evidence is overwhelming. Television violence can have very definite short-term effects and very probably long-term ones too. As Richard Goranson has recently concluded regarding television violence, we "must recognize the likelihood that real people are being hurt everyday because of it."[10]

If people learn by watching others on television then it is not just specific violence that is being taught. It is also a view of the world and the way to behave within it that is being promulgated. Using analyses of the content of the social roles and character portrayals on television, one study found that the police were portrayed as generally hardened and often brutal, private investigators as resourceful and more capable than police, salesmen as glib, journalists as callous, and truck drivers as aggressive.[11] Another found that teachers were the kindest and fairest, journalists the most honest, and scientists the least kind, the most unfair, and the least honest of all the occupations portrayed.[12] Thus television has potentially awesome powers for influencing the images of the world that people develop, and the characteristic modes of behaviour that they engage in.

The power that television has can be used for good or for bad. If television is capable of teaching such "anti-social" behaviours as violence, then it can also be used to teach "pro-social" attitudes and behaviour. Generally, by "anti-social" behaviour I mean behaviour which is undesirable and in some way hurts another person or society at large. By "pro-social" I mean behaviour which is socially desirable and in some way benefits another person or society at large.

Of course, what one considers to be pro-social as opposed to anti-social behaviour requires a value-judgment. That it is a value-judgment does not mean it is arbitrary, however. Most people will consider gratuitous violence to be anti-social. Likewise, most people will have no trouble endorsing self-control in the face of provocation; the use of intelligence and cooperation to solve difficult problems; industriousness; honesty; the ability to delay gratification when necessary; generosity; charity; and helpfulness; and a positive and non-cynical view of the world as pro-social. However it is that we end up defining that which is pro-social or good, the argument remains that television has the power to influence, indeed help socialize, people in that direction. The potential of television for making a positive contribution to people's social learning and development, and the greater good of society, is enormous.

Most of the research on the effects of television has been concerned with the more anti-social aspects of human behaviour, e.g. the relation of television violence

to aggressive behaviour. The pro-social possibilities of television have been relatively neglected. However, there is a small but growing number of studies that bear on pro-social behaviour. Like the early work on aggression, most of these studies have taken place in the experimental laboratory. Typically, the experimenter sets up a situation in which he can observe people's behaviour. Then he provides one group of people with the *experimental* treatment (e.g. showing them a television film demonstrating some pro-social behaviour). He provides another group of people with a *control* treatment (e.g. showing them a television film that has no pro-social content). The experimenter then observes the subsequent behaviour of the two groups. Any differences between the behaviours of the two groups must be due to the effects of the television program, for that is the only characteristic on which the two groups differed. By this manner, it can be known whether television programs that contain pro-social content can effect pro-social behaviour. One qualification ought to be mentioned at this point. Inasmuch as the pro-social behaviour that is being measured takes place in a laboratory setting (rather than real life), strictly speaking any conclusions must be limited to the laboratory. For example, if a television film induces an increase in helping behaviour on a laboratory task, we cannot be absolutely sure that it would also effect helping behaviour in situations outside of the laboratory. Hence, the results of laboratory experiments are only suggestive (sometimes strongly suggestive) of what goes on in real life, but they are not conclusive. For more conclusive evidence, we need naturalistic experiments that assess the consequences of television films in real-life situations. Some of the studies are of this type and support, rather nicely, the conclusions from the laboratory studies. I shall now review this research on the pro-social effects of television and, in order for the reader to know when a particular study is a laboratory rather than a naturalistic one, I shall differentiate between the two in the review.

The research will be reviewed in five chapters. The first (Chapter 3) concerns studies showing television's effect on such altruistic behaviour as generosity, helping, and cooperation. The second (Chapter 4) concerns television's effect on people's friendliness to one another. The third (Chapter 5) concerns television's effect on behaviour that requires self-control. These include the abilities to resist temptation and to delay gratification. Chapter 6 will consider television's ability to help people to overcome unjustifiable fears. Finally, Chapter 7 will consider the influence of television on social knowledge and cognitive development.

Chapter Three

Television's Effect
on Altruistic Behaviour

In Chapter 1, several studies were discussed that demonstrated how altruism was increased through watching others. In those studies, the altruistic model was present in a real-life situation directly in front of the observer. It was even possible for the observer to talk with, or even to lean forward and touch, the person he or she was observing. To what extent, however, can generosity and other altruistic behaviours be acquired from people who are seen behaving on a television screen when there is no opportunity for personal interaction? This chapter addresses this question. First laboratory studies will be considered.

Laboratory Studies

Dr. James Bryan at Northwestern University was one of the first to investigate this question. In a series of studies, [1,2,3] Bryan first had a child watch a five-minute television film of someone who played a bowling game, won gift certificates, and donated or did not donate some of these gift certificates to a charity. Following this, Bryan allowed the child to play the same game. During this time he watched the child through a one-way mirror to see how much of his or her winnings the child donated to a similar charity. The results showed that children were definitely influenced by the models they had seen presented over television. Children who had watched a television character behaving generously subsequently donated more to charity than children who had watched a television character behaving selfishly.

Two other studies have been carried out to test television effects on children's sharing in the experimental laboratory using similar procedures and have found very similar results. These other investigators also attempted to demonstrate that the effects of television could (a) generalize to very different situations from those initially portrayed and (b) endure over time. However, these attempts were not as successful as they might have been. One such study, for example, was able to show that children who watched a television model giving away some of his candy were subsequently influenced not only in how much candy they gave away but also in how much money they shared in a similar

situation. The television program did not, however, have an influence on a third measure of generosity, that of choosing to let another child play with the more attractive of two toys.[4] Another study found that English children too could be influenced to donate tokens to a charity by means of watching television characters do so. The television's effect had worn off, however, by the time the children were retested two weeks later.[5]

While the studies above do demonstrate that children can learn generosity from others who are portrayed on television, they are also fairly open to criticism as tests of television's generalized effect on children's natural behaviour. The first criticism is that the film materials used in the above studies are not like those produced for commercial purposes. They last for only five minutes and show one model acting a number of times in just one way (e.g. generous) in one highly specific situation. The second criticism is that the child who watches is then tested in virtually exactly the same situation that he has seen the model act in. Furthermore, the test for the television program's effects are taken immediately. Under these circumstances it is possible to argue that children are only learning specific behaviour in specific (and highly contrived) situations. Thus, from studies such as the above, it might still be possible for readers to hold on to their beliefs that *commercial* television is *not* capable of modifying the generous behaviour of children.

One study that attempted to control for some of these problems was carried out by Sprafkin, Liebert, and Poulos.[6] Responding to the criticism that previous laboratory research had used highly contrived film material, these investigators carried out an investigation with a highly successful commercial television program, i.e. *Lassie*.

Their experiment went as follows: Thirty first-grade white middle-class children were divided into three groups and shown one of three half-hour television films, complete with commercials. One group watched a pro-social *Lassie* program in which Lassie attempted to hide her puppy so that it would not be given away. The story's climax occurred when the puppy slipped into a

mining shaft and fell onto a ledge below. Lassie, unable to rescue the pup ran and brought her master, Jeff, to the scene. Jeff then risked his life by hanging over the edge of the shaft to save the puppy. It was this particular dramatic helping scene that had led the investigators to use this film as their example of pro-social behaviour. A second group of children watched a different *Lassie* program in which no pro-social helping occurred. This program featured the same major characters as the pro-social film. Instead of a dramatic helping scene, however, this program dramatized Jeff's attempts to avoid taking violin lessons. A third group of children watched a program called *The Brady Bunch*, a children's program which did not feature a dog, but instead featured the youngest Brady children's antics in attempting to set a record for time spent on a seesaw.

After watching the television program each child was taken to another room where there were a number of attractive prizes. Each child was told that he or she could win one of these on the basis of scoring points on a game. Without going into the details of how the game was played, suffice it to say that the number of points the child accumulated was displayed on a timer in front of him. The experimenter also told the child that ordinarily she was in charge of a nearby dog kennel but that she had left her dogs alone today so that she could help children win prizes. To be sure that the dogs were okay she wondered if the child would mind listening through some earphones while playing the game. If the child heard nothing on the earphones then everything was said to be fine and the child was to continue scoring as many points as he or she could. If, however, there was trouble back at the kennel then the child would hear the dogs barking over the earphones. The child was told that if he or she heard the dogs barking through the earphones help could be brought to them by pressing a Help button and this would bring the experimenter's assistant to the aid of the dogs. The child was told, however, that he or she might have to press the Help button for a long time before the assistant would arrive but that the child would know when he'd arrived because eventually the dogs would stop barking. It was pointed out that the child would have to choose between, on the one hand, helping the puppies by pressing the Help button, and, on the other, playing the game and earning points for a prize. The child was also told that there was a time-limit on the game and that when it was over there would be no further chance to win any points toward the prize. Given this conflict situation for the child between getting points toward a prize and helping dogs in distress, the question was, would the children who had seen the helping sequences in the pro-social *Lassie* program help more than children who had watched the other two programs? The answer was a clear yes. The mean average of time spent pressing the helping button for children who had watched the pro-social *Lassie* program was 93 seconds,

whereas for the neutral *Lassie* and *The Brady Bunch* programs it was 52 and 38 seconds respectively.

Thus this study very convincingly supports the previous laboratory studies and does so using a program from a highly successful commercial series. The conclusion from this first series of studies carried out in experimental laboratories (with several hundred children in all) is that television *can* have effects on children's sharing. The reader might conceivably, however, still argue that, although television programming had been shown to have effects on children's behaviour in the contrived situation of the laboratory setting, these effects had not been shown to occur in "real-life" settings. In order to answer this problem it is necessary to move right out of the laboratory situation and into natural settings. Fortunately some investigators have done this.

Naturalistic Studies

A study carried out by Stein and Friedrich,[7] found that television's effects on children's pro-social behaviour could be durable and generalizable in a naturalistic setting. They studied 97 children aged three to five years old attending a nine-week summer nursery-school program at Pennsylvania State University. For the first three weeks all the children's naturally occurring free play behaviour in the classroom was coded into categories such as "aggressive," "pro-social," "persistent," and "self-control," and baselines for each behaviour for each child were established. "Aggressive" included such sub-categories as physical aggression, verbal aggression, teasing, vigorously commanding, and tattling. "Pro-social" on the other hand included such subcategories as cooperating, being nurturant, and stating positive feelings and reasons to others. "Self-control" consisted of adherence to rules, tolerance of delay, and task persistence.

After three weeks of reliably measuring, a baseline for each child in each of the categories was established. The children were then randomly divided into three groups and exposed to four weeks of specially selected television. The first group watched aggressive television films such as *Batman* and *Superman* cartoons. A second group watched "neutral" films such as children working on a farm, and a third group watched pro-social television in the form of *Misterogers' Neighborhood*. (*Misterogers' Neighborhood* is an educational television film that stresses social and emotional development and includes the following themes: cooperation, sharing, sympathy, affection and friendship, understanding the feelings of others, verbalizing one's own feelings, delay of gratification, persistence and competence at a task, learning to accept rules, controlling aggression, adaptive coping with frustration). Over the four weeks a total of twelve one-hour television programs was shown to each group. Hence the schedule was approximately one session every other day. Following this four-week exposure to one of the three television diets, the

following (and final) two weeks were used to evaluate the extended effects of television viewing. The children's social behaviour was again coded into the categories mentioned previously and any changes over the baseline established during the first four weeks of the summer program were noted. The findings demonstrated that the programs the children watched affected their subsequent social behaviour. Thus those children who watched the aggressive films became more aggressive (at least those who were already above average in aggressiveness to start with did) while those who watched the pro-social television showed higher levels of self-controlling and achievement behaviour (task persistence) than those in the other two groups. For children from lower-social-status families, exposure to *Misterogers' Neighborhood* was also associated with increased pro-social interpersonal behaviour (cooperation, nurturance, and verbalization of feeling) in comparison with the other treatment groups. Higher-social-status children did not show positive effects on interpersonal behaviour, however. (This socio-economic status difference may have reflected baseline differences originally and, therefore, how much increase was possible.) Thus this extensive study carried out over a nine-week period dovetails nicely with the results of the laboratory studies cited earlier. Real classroom behaviour was modified as a result of watching an average of one half-hour a day of television.

In order to study further the pro-social effects of the education television program *Misterogers' Neighborhood*, Friedrich and Stein[8] carried out a second study. Seventy-three kindergarten children were randomly assigned to one of five television-watching conditions. One group of children watched four "neutral" programs including children's films about nature, a visit to the post office, and other topics unrelated to interpersonal relationships or feelings. The other four groups of children watched four programs from *Misterogers' Neighborhood* which were chosen to form a dramatic sequence. In this sequence, a jealousy crisis arose in which one of the characters feared that she would be replaced by a fancy new visitor. Much of the action centred on the attempts of friends to understand her feelings, reassure her of her uniqueness, and help her. These programs were edited by five to twelve minutes so that the total time for each was about 20 minutes. Children watched the television programs in groups of three or four over four days. Three sets of tests were given to the children shortly after they had viewed each of the films. The question of course was: "Would the children who had watched the pro-social television film be influenced in their responses to these tests in a manner different from those children who had watched 'neutral' films?" The answer once again was a "yes."

On the first test, a test of knowledge of content, it was found, perhaps not surprisingly, that children who had watched pro-social television learned this content better than children who had watched neutral films. Of more importance, though, they also generalized the ideas in the programs to new situations more closely related to everyday life. Thus it was shown that, at the very least, children were able to retain what they had learned from the programs. On a second test, a puppet-playing test in which the experimenter manipulated one puppet and the child a second, situations were enacted either parallel to the television program *Misterogers' Neighborhood* or somewhat different from it. The child's spontaneous verbal and nonverbal pro-social behaviour was observed within this puppet-playing context. In addition, sometimes the experimenter would ask the child specific questions, e.g. "How do friends show they like you?" Once again, children who had watched the pro-social television films showed more pro-social behaviour than children who had watched neutral films. This was true both in situations that were similar to those in the *Misterogers' Neighborhood* program and also to those that involved new situations. On the third test, a behavioural measure of helping another child in a quite different context, there were no overall differences between those children who had watched pro-social television programs and those who had watched the neutral television programs. However, if watching the pro-social television was paired with direct training to be helpful through "role-playing" techniques, then children in this condition were more helpful. This suggests the possibility that pro-social television might be used as an adjunct to other training procedures when attempting to teach or enhance pro-social tendencies in children – as nursery-school teachers and parents might well wish to do.

Summary

Several different studies were discussed in this chapter. All of them found that television affected children's altruism and generosity. Some of the studies used five-minute television films of highly salient models engaging in very specific behaviour and then assessed their effects on children who were placed in highly similar circumstances to the television model. Still others provided children with up to twelve one-hour television programs over a period of four weeks and measured the effects on children's free-play behaviour with other children. Regardless of the methodologies used, the effects were the same. Children who were exposed to television films having altruistic content subsequently demonstrated more altruism in their own behaviour, compared to other children who did not see films having altruistic content. Thus we can conclude that altruistic content on television can lead to increments in the altruistic behaviour of those who watch it. This conclusion however is limited to children. No studies have been carried out using adults as subjects to see if altruistic television programming can affect their behaviour.

Chapter Four

Television's Effect
On Friendliness

Most people would consider friendliness to be socially desirable behaviour. Friendliness in others does make life substantially more worthwhile. Friendliness is more than just socially desirable, however. It is also socially necessary. The absence of friendliness in others can lead to hostility, depression, and breakdown in individuals who are cut off from it. It can lead to the breakup of social organizations and institutions in which it is lacking. Ultimately society is impossible without it. Clearly it is worthwhile to discover what factors there are that can increase such behaviour. One possible such factor is television.

Laboratory studies

In a laboratory study, Fryrear and Thelen[1] showed nursery-school children videotaped films of adults expressing affection, and playing in a friendly manner toward a small stuffed clown. Children were then given an opportunity to play with a group of toys which included the small clown. An observer sat in the back of the room and watched to see whether the child imitated the affectionate behaviour. Children who watched television films of models behaving affectionately were more likely to express similar affection while playing than children who had not seen such behavioural examples on television. One important, and interesting, qualification to Fryrear and Thelen's findings was that *boys* were likely to become more affectionate only if they had seen an adult *male* behave affectionately on television. If the same behaviour had been demonstrated by an adult female then the boys were not so influenced. Thus television is similar to real life in its effects. People select who they learn from and perceived similarity can be important. However, the fact that television programming can effect children's demonstrations of affection *was* shown in this laboratory experiment.

Naturalistic studies

A dramatic and potentially important study was carried out to see if television programs could be used to enhance social interaction among those nursery-school children who tended to isolate themselves from their

peers.[2] Thirteen fairly severely solitary children were chosen for the study. In order to qualify, the children first had to be rated as socially withdrawn by their head teachers. Of 365 children enrolled in nine nursery school classes, 45 were nominated by teachers in this preliminary selection. Each of these children was then systematically and reliably observed on 32 occasions over a period of eight days to see if they engaged in social interaction with a peer. Thirteen children who were interacting on fewer than five of the 32 possible interactions were included in the study. Thus, to qualify for the experiment, children had to meet the dual criteria of having exhibited extreme withdrawal over a long period of time as judged by their teachers, and to have displayed isolate behaviour as measured by objective behavioural observations. One group of these isolated children was then shown a specially prepared sound-colour film shown over a television console. This film, which lasted for just over 20 minutes, portrayed a sequence of 11 scenes in which children interacted in a nursery-school setting. In each of the episodes, a child was shown first observing the interaction of others and then joining in the social activities, with reinforcing consequences ensuing. For example, the other children offered him play material, talked to him, smiled, and generally responded in a positive manner to his advances into the activity. The scenes increased over time in terms of the vigour of the social activity and the size of the group. The initial scenes involved very calm activities such as sharing a book or toy while two children were seated at a table. In the ending scenes, as many as six children were shown gleefully tossing play equipment around the room. Furthermore, all the modelling scenes were accompanied by a female narrator, judged by the experimenter to have a very soothing voice, describing the actions of the model and the responses of the other children. For comparison purposes, a second group of the isolated children were shown a film of dolphins engaging in acrobatic feats. This film was accompanied by a musical sound-track.

Following exposure to one of the two films, children were returned to their regular classrooms. Once again they were systematically and reliably observed on 32

occasions over a period of eight days to see if they were engaging in social interaction with a peer. The people doing these observations were kept unaware of the particular programs the children had watched, thus eliminating the possibility of this source of observer bias. The results were quite dramatic. Children who had watched the specially-made film about others engaging in social interaction increased from their baseline score of an average 1.75 interactions out of the 32 possible to an average of nearly 12 interactions out of the possible 32. The control group who watched the program about dolphins showed no increase over their baseline scores at all. The strength of this finding is even greater when it is realized that a random group of 26 *non*-isolated children who did not see television programs averaged 9 interactions out of the possible 32. Hence, children who at one point appeared severely socially withdrawn were now actually interacting more often than "normal" children. The strength of the finding is enhanced even further when a follow-up study at the end of the school year showed that teachers, who had been kept uninformed of which program the children had seen, rated the children's behaviour in a manner that paralled the "objective" behavioural measures. Only one of the six children who had been in the "modelling interaction" condition was still rated as an isolate whereas four of the seven "control" children were again judged to be extreme isolates. This study showed quite clearly that by devising carefully constructed film material to show over television monitors significant social behaviour can be altered among nursery-school children and, furthermore, that such behaviour change can be quite long-lasting.

Fechter[3] carried out a study with mentally retarded adults. One group watched a five-minute film of a 12-year-old child beating up a large inflatable Donald Duck doll. Another group watched a five-minute film of a 12-year-old child playing in a friendly manner with the same doll. The behaviour of the retardates was then observed for five minutes in the experimental room and for 30 minutes on the ward and coded either as friendly (e.g. talking) or aggressive (e.g. fighting) by observers who were not aware of which films the patients had seen. In the ward, the number of aggressive responses increased slightly (from baseline measures) after the aggressive film, and decreased following the friendly film. These results therefore suggested that a television presentation, while not necessarily leading to direct imitation, can nonetheless communicate the "mood" in viewers, with this "mood" being expressed behaviour which is rated by others.

In an experiment designed to assess the effects of both *Sesame Street* and *Misterogers' Neighborhood* on children's social behaviour in the preschool, Coates, Pusser, and Goodman[4] carried out the following study. First of all, 32 children aged between three and five years were observed over several days and the frequency of their different behaviours was recorded

into one of the following three main categories which the authors described as follows:

(1)*Positive reinforcement*: giving positive attention such as praise and approval, sympathy, reassurance, and smiling and laughing; giving affectionate physical contact such as hugging, kissing, and holding hands; giving tangible reinforcement such as tokens, prizes, and other objects.

(2)*Punishment*: giving verbal criticism and rejection such as criticism, negative greetings, obvious ignorings, and sarcasm; giving negative physical contact such as hitting, biting, and kicking; withdrawing or refusing tangible reinforcement such as taking away a toy.

(3)*Social contact*: any physical or verbal contact between a child and another child or adult.

Following these baseline measures children watched either 15 minutes of *Sesame Street* or 15 minutes of *Misterogers' Neighborhood* for each of four days. These programs had originally been shown on the U.S. Public Broadcasting System in March 1973 and had been scored on the basis of a content analysis[5] for the frequency of occurrence of positive reinforcement and punishment that took place within the program. After watching these programs in a group, each child was observed for a three-minute period and the frequency with which he emitted one of the behaviours mentioned above was recorded. In addition, for four days following, while no television programs were shown, each child was again observed for three minutes per day for the frequency of giving of positive reinforcement and punishment to other children and to adults in the nursery school. As before, these observations were conducted during the pre-school free-play period.

The results showed that exposure to the 15-minute television programs did affect the children's social behaviour in a significant manner, and particularly on the immediate post-viewing tests. For all children *Misterogers' Neighborhood* significantly increased the giving of positive reinforcement to, and social contacts with, both other children and adults. These findings were in direct accord with those of Stein and Friedrich[6] also concerned with the *Misterogers' Neighborhood* television program. For *Sesame Street* the effects were only found for children who had low baseline scores. For these children, watching *Sesame Street* significantly increased the giving of both positive reinforcement and punishment to, and social contacts with, other children and adults in the preschool. For children whose baseline scores were high, *Sesame Street* had no significant effect on behaviour. Furthermore, the authors felt that the pattern of results was generally consistent with the content analysis of the two programs they had carried out earlier.

Summary

The results of one laboratory and several naturalistic experiments have definitely demonstrated that the type of interpersonal interaction engaged in can be affected

by the content of the television programs that are seen. Friendly behaviour increases among people who have seen friendly behaviour portrayed on television. This conclusion at the moment, unfortunately, rests on a generalization from studies concerned, with one exception, only with nursery school children. The exception involved mentally retarded adults.

Chapter Five

Television's Effect on Behaviour Involving Self-Control

Learning to acquire control over our own behaviour is a long process that starts from the first few months of life. It is a requirement for civilized living. Indeed, a society made up of people who are incapable of exerting a control over their own behaviour can hardly be conceived of. Although different individuals and cultures may disagree over what is the optimal amount of self-control that is considered desirable, there is no question that some degree of this behaviour is absolutely necessary. We have briefly discussed in Chapter 1 how a real-life model can influence this behaviour in children. This chapter will consider some of the studies carried out on the effects of television on this behaviour.

Laboratory studies

Several studies have examined self-control processes in children in response to television programming. Stein and Bryan, [1] in a laboratory experiment, explained to children the rules by which they could win money by playing an electronic bowling game. Before playing the game the children watched a television program in which they saw another child playing the same game, who either kept to the rules and at the same time preached that the rules ought to be kept, or broke the rules and preached that they ought to be broken. Children who watched the television program that modelled and preached keeping to the rules cheated only to the extent of awarding themselves incorrectly an additional 12.5¢. However, children who had watched a television model violate the rules and preach the rightness of such violations, awarded themselves incorrectly an additional 28.2¢. Thus, within the laboratory at least, it was shown that keeping or breaking rules and, in effect, stealing, could be affected by brief television programs.

Other studies, too, have been carried out to see whether television programming could influence children's self-control in a "resistance to temptation" situation. In an experiment carried out by Wolf and Cheyne,[2] seven-to-eight-year-old boys were taken to a games room and allowed to play with some toys. The children were told, however, that they were not to touch or play with one particularly attractive toy. Children were watched for a ten-minute period through a one-way mirror and it was recorded (a) how long it took before those children touched the forbidden toy and (b) for how many minutes of the ten minutes they were in the room they actually played with the toy. The investigators reported that an average of four minutes and 40 seconds would go by before an average child in this situation would touch the toy. However, if the child had watched a television program of another child playing with similar toys and this television child had *not* touched the toy, then the average child would wait nearly eight minutes before touching the toy. If, on the other hand, children had watched a television program of another child violating the rule and touching the forbidden toy, then he would himself be likely to touch the toy within less than three minutes. Very similar results were found when the measure of the child's resistance to temptation was based on the *length* of time he played with the toy. The average child would play with the forbidden toy for about one minute out of the ten that he was observed. If he watched a television program of another child violating the rules then he would play with the forbidden toy for nearly four out of ten minutes. If, however, he watched a television program of another child adhering to the rules and not touching the forbidden toy then he would touch the forbidden toy for only about two and half seconds.

In order to see if the socializing influence of the televised programs was durable over time, the youngsters were brought back one month later, put into the same situation, and again observed to see how long it would be before they gave in to the temptation of playing with the forbidden toy. Once again the results tended to show an effect for the television program. Whereas children who had seen no television film one month earlier managed to resist the temptation for nearly six minutes, children who had seen a model giving in to the temptation only resisted for four minutes. In this four-week retest no effect was found for the "self-controlled" model, i.e. although the deviant model had an effect on increasing deviancy the self-con-

trolled model did not manage to increase self-control in observers.

In a subsequent study, Wolf[3] showed again that televised models who obey rules have an influence on helping children to obey, whereas televised models who deviate from rules tend to influence children to deviate. Once again television had more effect as a bad example than as a good one. Children who watched someone break the rules subsequently broke the rules themselves more than children who watched someone else keeping the rules subsequently kept them.

Still another form of self-control is the ability to delay gratification to a later point in time. In a study carried out with 72 nine-year-old New Zealand children, Yates[4] demonstrated how television programs could substantially alter children's ability to delay gratification over a four-week period. First a baseline measure was obtained of the children's ability to delay gratification. Essentially children were asked if they would prefer a smaller reward such as money or candy immediately, or a larger one by waiting for seven days. Some time later, some of the children watched television programs of an adult female model exemplifying high-delay behaviour and/or verbalizing reasons for delaying gratification. Other children did not watch such programs. Compared to these "controls," children who had watched the television programs showing delay of gratification were subsequently more likely themselves to choose to delay their gratification for a larger reward later. The greatest magnitude of change occurred when modelling and persuasive cues were combined. Furthermore, when the children were retested four weeks later, their behaviour still showed the effects of the exposure to the television film. Children who had watched the television portray someone preferring a larger reward later to a smaller one immediately were themselves more likely to "defer gratification" and take the larger reward later.

Naturalistic studies

In a study described in some detail in Chapter 3, Stein and Friedrich[5] showed the television program *Misterogers' Neighborhood* to 93 nursery school children for four weeks and observed their free-play behaviour. In addition to increasing generally altruistically behaviours, these programs also increased self-control in the form of obedience to rules, tolerance of delay, and persistence in tasks. By way of comparison, it might be noted that the aggressive films in their study led to a decrease in self-control on these same measures. Additional analyses showed that when the children were frustrated those who had watched a diet of pro-social television programs were less likely to show aggression and more likely instead to manifest increased pro-social behaviour in response to the increased frustration. Again, the opposite set of behaviours was found for the children who had watched aggressive television programs. Such children showed a decrease in pro-social behaviour with increased frustra-

tion, and a general increase in aggressiveness. Thus, the evidence seems to be that relatively little (one hour every other day for four weeks) pro-social television can influence the amount of self-control that children engage in in natural play settings.

Summary

Several studies have demonstrated that self-control, in both laboratory and natural settings, can be affected by what children watch on television. Cheating on games, touching forbidden toys, preferring a larger but delayed reward, and responding to frustrative situations, could all be affected by the content of television programming. Of considerable interest is the fact that these behaviours could be influenced in either direction, and indeed possibly more easily influenced in the anti-social direction. Thus, if television shows people cheating, disobeying rules, preferring the immediate payoff rather than even better ones later, and responding to frustration with little display of self-control, then this is what it will produce in viewers. If, on the other hand, it portrays models who prefer to exhibit self-control in the presence of temptation and frustration, then these are the behaviours it will shape.

Chapter Six

Television's Effect on Diminishing Inappropriate Fears

Most people at some time or another during their lives develop what might be called an inappropriate fear of some situation or thing. Often such fears are somehow or other dealt with and gotten over during the course of living. Still others, while perhaps never overcome, are of such minor consequence that they don't interfere very much with ongoing life activity. Still other inappropriate fears are more disruptive, however, and these are often treated in therapy where they are referred to as phobias. Most phobias can now be "cured" by the use of a number of techniques known collectively as behaviour therapy. By treating phobias as essentially no different in kind from any other fear, i.e. a learned response to a particular situation, therapists are able to help people overcome their fears through providing them with new learning experiences in the presence of those situations or things which elicit the fear. Since it has now been widely established that people can learn by watching others, some research scientists have started to explore the possibility of using television to help people deal with and overcome their fears. Some of these exploratory investigations will be discussed here. They have all used controlled laboratory situations to investigate this problem. However, as will be seen, the behaviour measured is far from inconsequential to the individuals concerned.

The first study to be reported concerns young children who were inappropriately afraid of dogs (a not uncommon fear in young children). Bandura and Menlove[1] first measured children's willingness to approach and play with a cocker spaniel on a number of occasions. In this way they discovered which children were afraid of dogs. Some of these children were then shown eight specially-prepared three-minute film programs over an eight-day period in which they saw other children playing with dogs. Another group of fearful children was shown movies of Disneyland instead. After watching these films the children were again given opportunities to approach live dogs. Children who were previously fearful but had watched a film program of other children showing courage were now much more likely to approach and play with the dogs than the children in the control group were.

Furthermore, this reduction in fear generalized to dogs quite different from those seen in the film and, furthermore, was maintained over a four-week retest period.

Another study[2] was carried out to see whether film programming could help adolescents and adults reduce their fear of snakes. Only those who reported having a severe fear of snakes were used. For example, their dread of snakes had actually to be so severe as to interfere with their ability to do gardening or go camping for them to be used in the study. Stringent behavioural and attitudinal measures were taken to assess the actual degree of fear aroused by snakes. The investigators then attempted to get their clients over their fear of snakes in a number of ways. One of these ways included the use of specially-constructed film which showed young children, adolescents, and adults engaging in progressively threatening interactions with a large king snake. The film was in colour and lasted for nearly 35 minutes. Following the film, the attitudinal and behavioural measures were taken again in the presence of live snakes. The findings were clear. People who had watched the special film significantly reduced their fears on the behavioural tests compared with those who had not watched the film. It might be mentioned that the behavioural measures were quite stringent and included actually holding the snake in the hands. The ultimate test (which few indeed passed) included allowing the snake to lie in their laps while they held their hands passively at their sides.

Weissbrod and Bryan[3] attempted to see whether similar techniques would succeed with eight-to-nine-year-old children. Only children who indicated an extreme fear of snakes on a fear inventory and who also refused to pet a snake during a pretest were included in the study. These children then watched a 2½-minute videotaped sequence involving a model either approaching a live four-foot boa constrictor (the experimental group) or a stuffed five-foot toy snake (the comparison condition). All children watched their respective films twice through and then, two days later, watched them twice through again. Following this second showing of the film the children were taken to an aquarium which housed a four-foot boa constrictor

and asked to touch, then pet, and then hold the snake. The experimental group were able to go further into the sequence than were the control comparison group, and furthermore maintained their superiority on another test taken two weeks later. For example, while none of the ten children in the control condition were actually able to handle the snake two weeks after watching a "neutral" film, 11 out of the 40 children in the experimental condition were able to handle the snake.

Summary

Three separate studies have dramatically illustrated the power of television to modify people's inappropriate fears. The potential for television programs to be used effectively in the therapeutic context have thus been demonstrated. Some of the implications and possibilities for using film-presented therapy have been discussed elsewhere (e.g. Bandura[4]). The studies reviewed in this section used specially-constructed film material. Furthermore, the films were shown in what might be called a therapeutic context. These factors mean of course that we need further evidence before we can generalize directly to commercially-produced programs watched by viewers sitting in their living-rooms. Nonetheless, it seems right to include this material in this report. If such powerful emotional reactions as fear of snakes can be modified by (albeit specifically constructed) 35-minute films, it does support the possibility of television's reducing many lesser inappropriate fears through normal programming.

Chapter Seven

Television's Effect in Creating Knowledge

When discussing the role of television in disseminating information, it is possible to distinguish between didactic and non-didactic programming. Didactic programming is that which has been especially prepared to foster certain knowledge or skills. It is educational in intent. Non-didactic programming was never intended to educate. Commercial entertainment dramas are of this nature. Nonetheless, these programs might also have the effect of altering people's beliefs about the world. I shall first discuss didactic programming.

Didactic Programs

In 1969 an organization called the Children's Television Workshop, after two years of planning funded by both public and private agencies, put *Sesame Street* on the air. The intent of this program was to educate. It was aimed at children from three to five, and particularly those children who did not have access to nursery schools. It used commercially proven tactics to hold attention such as animation, fast movement, and slapstick humour. Its educational intent was to foster such skills as the ability to recognize letters, to count, to know the meaning of words, and so on.

Ball and Bogatz[1] carried out an independent assessment of *Sesame Street* under the auspices of The Education Testing Service. They sampled a total of 943 children of both sexes (731 of whom were considered "disadvantaged") from five widely separated areas of the United States who had watched the program over a six-month period. The research strategy had initially called for the sample to be divided into two groups: one group which had watched *Sesame Street* regularly and a second group which had not. In that way it would have been possible to make direct comparisons. Unfortunately, the authors found that, owing perhaps to the popularity of the program, too many of the children in the "not-encouraged to watch group" had in fact watched the program, thus making comparisons between the two groups unlikely to show an effective difference. They were able to get over this problem, however, by dividing the whole group into quartiles (a quartile contains exactly 25 per cent of the cases in the sample) on the basis of how much viewing of *Sesame Street* had taken place. Quartile One rarely watched *Sesame Street*. Quartile Two watched two or three times a week. Quartile Three watched about four or five times a week, and Quartile Four watched more than five times a week.

All the children had been pretested on a series of specially-prepared tests of knowledge six months previously – before any of them had had an opportunity to watch *Sesame Street*. Now after six months of watching in different amounts, the children were tested again on the same or similar tests and any gains they had made were assessed. Overall, and on a number of their subtests, Ball and Bogatz found that (1) those children who watched the most learned the most, (2) the skills that were best learned were the ones that received the most time and attention on the program itself, (3) the programs did not require formal adult supervision in order to produce their educating effects, (4) these effects held regardless of age, sex, geographic location, socioeconomic status, IQ, and whether the children watched at home or at school, and (5) three-year-olds gained more than five-year-olds.

Unfortunately, there was a major confounding in this first study. Children who had watched the most had both higher pretest scores on the different measures than children who had watched little, and also significantly higher IQ scores. Indeed there was a perfect rank ordering of mean IQ with quartile of watching. Essentially the more intelligent children watched *Sesame Street* more than less intelligent children. This meant that any gains attributed to watching *Sesame Street* might simply have been due to higher IQ children's acquiring more general knowledge over the same six-month period from sources other than *Sesame Street*. In order to attempt to tease out the correct relationship, Ball and Bogatz carried out a number of additional analyses in order to demonstrate the effects of *Sesame Street*. They pointed out for example that three-year-olds who watched most ended up with higher post-test scores than four- and five-year olds who watched little. Further that "disadvantaged" children who watched a lot scored higher than middle-class children who watched only a little, and that children who had

Spanish as their first language made the most overall gains. Hence, overall, the results did seem to *suggest* that watching *Sesame Street* effectively increased the children's knowledge.

More definitive results had to wait for the second-year report. In this study, Bogatz and Ball[2] studied a real experimental group against a comparable control group. The authors went into areas in North Carolina and Los Angeles where *Sesame Street* could be watched only on certain channels that not everybody could get (e.g. cable television). The authors then arranged for one group to receive the channel containing *Sesame Street* while the matched controls continued not to receive it. The experimental group were encouraged to watch the program. Although on pre-tests the children in both groups were equivalent, on the post-test clear and significant gains had been made on a number of the tests for the group that had watched *Sesame Street* compared to those who did not watch the program. These gains were found on tests that included knowledge of the functions of parts of the body, the naming of geometric forms, the role of community members such as firemen and mailmen, recognizing numbers, the naming of letters, and sight reading. The effects however were not very large. Typically, after six months of watching, the experimental group knew only two or three letters of the alphabet or functions of the body more than did the control group. However the possibilities of using television for didactic purposes with nursery-school children is just in its infancy. Certainly *Sesame Street* has been shown to hold the attention of its viewers. Furthermore instructional television has certainly been shown to be at least as effective as more traditional instruction with slightly older children in proper school settings.[3] *Sesame Street* had education as a specific goal. To what extent, though, do people learn about how the world operates and about the different people found therein from commercial television programs?

Non-Didactic Programs
Occupational roles

One of the interesting findings from *Sesame Street* studies was that it taught children about occupational roles.[2] To what extent though does commercial television influence our perceptions of other occupations and people? To what extent is our conception of a policeman (or a policeman's conception of what it's like to be a policeman) influenced by the police that are portrayed on television? Unfortunately, hard experimental data on this particular question are few and far between. Researchers have, however, done content analyses of the social roles and character portrayals on television. As mentioned in Chapter 2, Defleur[4] found that television portrayed the police as generally hardened and often brutal; private investigators as resourceful and more capable than police; salesmen as

glib; journalists as callous; and truck drivers as aggressive. Smythe[5] found that teachers were the kindest and fairest, journalists the most honest, and scientists the least kind, the most unfair, and the least honest of all the occupations he studied.

Ethnic groups

On American television the characters portrayed are overwhelmingly young, white, middle class, and American. Most ethnic minorities and citizens of foreign countries are ignored. When they are presented they are often made to look either ridiculous or villainous. Pierre Berton has recently discussed how Hollywood has traditionally portrayed Canada and Canadians and this is a good case in point. [6] In response to Black American protest, portrayals of Black Americans seem to have shifted somewhat in recent years, so that they are now presented in higher-status positions. In a recent content analysis of television, Donagher, Poulos, Liebert, and Davidson [7] found that black males, for example, were usually portrayed as non-aggressive, persistent, altruistic, and more likely to make reparation for injury than any other group. Black women had a high ability to explain feelings in order to increase understanding, resolve strife, and reassure others. Unfortunately no studies have actually been carried out to see whether these particular portrayals are actually mirrored in viewers' perceptions. On the other hand one early study did find that television could influence children's attitudes about foreigners.[8] In addition, a very recent Canadian study has shown that children's verbal play preferences could be made more favourable to minority groups after viewing specially-prepared inserts on *Sesame Street*.[9]

Sex roles

Females are totally under-represented on television. When they are represented it is in a very narrow range of possibilities. The typical television female is perhaps best represented by the television commercial which represents her as ecstatic with the excitement of presenting a new type of food product (or shiny kitchen floor) to her husband, children, or neighbour. The alternative is to present her as a young, glamorous seductress. A study carried out by Sternglanz and Serbin,[10] for example, content-analyzed a number of children's programs that had high Nielsen ratings. They found, first of all, that males were portrayed nearly twice as often as females. There were also major differences between the sexes in the types of behaviour portrayed. Males, for instance, were more often portrayed as aggressive and constructive (e.g. building, planning) than females, while females were more likely to be shown as deferent and passive. In addition, the consequences that males and females received for emitting behaviour were different, with males more often being rewarded and females more often receiving no consequence. An exception to this was that females were

more often punished for high levels of activity than were males. Thus it appeared that commercially-produced television programs were carrying quite different messages about the appropriate behaviour for males and females. Given the general evidence on the effectiveness of modelling on television as a means of teaching behaviour, television may well be an important source in the learning of stereotyped sex roles.

Summary

The research relating to television's effect on viewers' knowledge of the world has not been quite as extensive as the research on the direct effects on social behaviour. Nonetheless it is highly suggestive and a source of concern.

If viewers alter their perceptions of various roles accorded to the sexes, the races, or the occupations as a result of the television programs they watch, then television has a powerful potential for presenting these roles in positive or negative lights. The potential for teaching and educating in a positive manner in this way may be immense.

Chapter Eight

Conclusions and Recommendations

Conclusions

Over 20 different experimental studies have been reviewed from both laboratory and naturalistic settings. These have demonstrated that television and film programs can modify viewers' social behaviour in a pro-social direction. Generosity, helping, cooperation, friendliness, adhering to rules, delaying gratification, courage, and cognitive knowledge, can all be increased by television and film material. This general statement accords with the partial reviews of this same literature that have been carried out previously (Bryan and Schwartz;[1] Liebert, Neale & Davidson;[2] Stein and Friedrich,[3]). Overwhelmingly, these studies were concerned with *children's* behaviour. There were two exceptions: Fechter[4] showed that the ward behaviour of institutionalized mentally retarded adults could be influenced to be friendlier and less aggressive after watching affectionate behaviour being expressed on film, and Bandura, Blanchard, and Ritter[5] showed that films could be used to help adults overcome their fear of snakes.

On the basis of the studies reviewed in this report it must be formally concluded that, for children at least, television *does* have the power to affect the social behaviour of viewers in a positive, pro-social, direction. This conclusion, therefore, provides a mirror-image to that even larger body of research demonstrating a relationship between television and anti-social behaviour.

It would appear that television has the power to influence social behaviour of viewers in whatever direction the content of the programs dictates. If, on the one hand, pro-social helping and kindness make up the content of television programming, then this is what is learned by viewers as appropriate, normative behaviour. If on the other hand, however, it is anti-social behaviours and uncontrolled aggression that are shown, then this is what viewers learn to be the norm. This view will fit with the fact that, in 1970 alone, over three billion dollars was spent advertising products on U.S. television.[6] Advertisers believe, correctly, that brief 30-second exposures of their product, repeated over and over, will significantly modify the viewing public's

behaviour in regard to those products. In this regard it is interesting to note that while television companies encourage advertisers to believe that this is the case they are not so eager to agree that their drama sequences can have equally powerful effects. It is not reasonable that television companies can have it both ways. The message therefore is quite clear. Children learn from watching television and what they learn will depend on what they watch. Most of the studies reviewed used programs that ran for only a few minutes. They demonstrated statistically significant effects. One can only guess at what the effects of two or three hours a day, seven days a week, 52 weeks a year for 18 or more years, would be!

Recommendations

The recommendations that follow from the evidence reviewed above are also clear:

1. First we must alter our conceptualization of what the nature of television is. Television is much more than entertainment. It is also an educator, a source of observational learning experiences, a setter of norms. It determines what children will judge to be appropriate behaviour in a variety of situations. When we consider that the average child spends almost as much time watching television as he or she does in school, or playing with his or her friends, or talking with his or her parents, we can get some idea of the magnitude of the situation. Television must now be viewed as one of the major agencies for the socialization of children that our society possesses. There has been a reluctance to see television in this light, and probably for the good reason that television was never intended to be an agent of socialization. But, however unintentionally it occurred, television *is* an agency for socialization. It does shape and affect the behaviour of those who watch it. Once this is grasped, issues of power and control become apparent.

2. A greater degree of public control must be exerted over the content of television drama than currently occurs. While there is some evidence that adults' evaluative comments about the behaviour being portrayed on a television screen do affect the impact it has on young

viewers,[7] this is not really an adequate form of control. Adults cannot possibly continually monitor their children's television-watching behaviour. Control is going to have to be exerted over the content of television before it comes on the air. The content of television programs today is not, of course, uncontrolled. In the main it is controlled by "the ratings," i.e. measures of how many people tuned in to that particular program. If "violence sells," the networks can hardly be blamed for increasing violent content. However, the larger purposes of society must be considered. The question is, "Can we afford to leave the content of television programs to be controlled by the ratings?" One view that has been put forward[2, 3] is to extend the control over the television system to that which is currently exerted over the educational system. The educational system is controlled in part both by elected local boards and by elected municipal and provincial government agencies. Ultimately it is the government that is responsible for the curricula of the schools. This line of reasoning leads in the end to there being as much government control over television as there is over education. While such a method of exerting control might be considered rather extreme in the present context, there is no doubt that some additional control is needed. Essentially we should be increasing the amount of pro-social content, and decreasing the amount of anti-social content. Some other ways in which action by the government could bring this about have been discussed elsewhere.[8]

3. Additional research should be funded:

(a) First research should be carried out to study the effects of pro-social content on adults. As already noted, the overwhelming majority of studies have been concerned with the social behaviour of children. What kinds of pro-social television will significantly alter adults' behaviour, however? Indeed, *will* adults' social behaviour be as readily influenced as young children's is? This would seem to be a very important question indeed. It is also noteworthy that in the violence research, too, very few studies have been concerned with adults. Most have been carried out with children and adolescents.

(b) A second very important line of research concerns the durability and generalizability of learning from television. To what extent will the learning that occurs from watching television endure over time and generalize to new situations? Although there are some data on this, much more is required.

(c) A third very important line of research derives from our discussion in Chapter 7 concerning the effects of television's portrayal of social roles. While the content analyses that have been carried out suggest what kinds of roles are being portrayed for the different sexes, ethnic groups, and occupational roles, it has yet to be empirically established that changes in the roles portrayed on television actually do lead to changed perceptions of those same roles in real life, on the part of the viewers. Studies to investigate this could readily be carried out if funding was made available.

(d) A fourth line of research would be to develop more sophisticated coding frames so that the ongoing material content of television programs can be analyzed as to its pro-social (and other) matter. One purpose of this would be so that concerned agencies and people could monitor changes that occur over time in television content (e.g. is pro-social content increasing over anti-social?). Beginnings have already been made in this area [9, 10] but additional research here, as elsewhere, would also be very worthwhile.

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Replications
of
Media Violence

Prof. R. A. Stanley M.A.
and
Brian Klein M.A

Contents

Chapter One

Defining the Problem

The concern regarding the impact of violence in the media has a number of aspects. It is believed that media violence:

- makes people (or at least certain members of our society) generally more aggressive in their dealings with others;

- has an emotional impact which may in some cases make people fearful or anxious regarding their personal safety, and in others cause them to accept violent behaviour as normal and thus become indifferent to it;

- provides models of violent behaviour which may, under certain circumstances, be imitated.

All are legitimate causes for concern and may have serious implications for our society. Although violence in dramatic or news form is by no means an invention of our age, the present pervasiveness of the mass media and the greater impact of film and television in terms of both audiences reached and the emotional impact of the audiovisual stimuli means that its effects are potentially more far-reaching and serious than ever before.

In Canada there is widespread anxiety about the threat of growing levels of violence. Because of the experience of the United States, it is feared that Canada may become similarly threatened, and that any increase in violent crime may be part of a trend that will make our streets and homes as dangerous as those in the big cities of the United States.

In this climate of anxiety it is not surprising that we are anxious to identify the causes of violence and do what we can to eradicate them. It is generally recognized that the origins of crime, and particularly crimes of violence, are complex and have their roots in the social and economic conditions of our society, as well as in the particular experiences and personalities of the individuals concerned.

There is no doubt, however, that the media are considered by many people to be responsible, at least in part, for the violence that exists in Canada today. Recent public opinion studies have shown that a very high percentage of those surveyed believe that television violence causes some people to become more aggressive and that certain types of violence may be imitated by

people, especially those with emotional or personality problems.[1]

This replication of media violence receives a great deal of publicity and there is considerable circumstantial evidence that it exists. For example:

- crimes of a particularly sensational or dramatic nature – which inevitably receive extensive news coverage – often seem to be imitated; for example, three of the most sensational mass murders in recent U.S. history took place over a period of several months during the summer of 1966;

- the police report that, on occasion, those who confess to a crime claim to have obtained the idea from television programs or films; at the same time, the police themselves are faced with crimes which resemble in so much detail the methods presented in earlier police dramas or news reports or that they believe there must be some connection between the two.[2]

Although such evidence is indicative, it does not establish beyond reasonable doubt that there is a connection between the media (be it drama or news reports) and real-life incidents – much less that there is a causal relationship. There are a number of factors which may cast doubts on the reliability of such evidence and provide alternative explanations:

- in many cases the possibility of coincidence or, perhaps, some common origin for both the media incident and the supposed imitation is not always satisfactorily ruled out;

- given the absence of a real understanding of the dynamics of crime and violence, there is an understandable tendency to over-play the importance of factors that are visible and more easily comprehended; at a superficial level, the media violence as a cause of crime seems to fall into that category;

- given the publicity that media violence has received, there is a greater awareness of the possibility of the role that may have been played by the media in any given crime of violence; hence, the tendency is to look for similarities and, sometimes, to find them on the basis of very tenuous evidence.

To establish that an act of violence was "imitated" from something witnessed in the media does not necessarily prove (and indeed it is very unlikely) that a direct causal relationship exists between the imitated act and its source in the media. At best, one may establish that the media are a contributing factor in acts of violence. The nature of that contribution may take a number or combination of forms:

• an individual may learn from the media some technique or style of violence that becomes an active part of an existing repertoire of violent behaviour;

• an act of violence presented in the media may act as a stimulus that lowers the individual's inhibitions against acting out violence and thereby contributes to violence that might not otherwise have found expression.

In the following chapter we look more closely at the evidence that may explain the nature of the link between "fantasy" violence and subsequent violent behaviour.

Chapter Two

Laboratory Studies on Imitation

A great deal of research has been carried out under controlled conditions into the relationship between aggressive behaviour viewed on film or television and subsequent behaviour. In a typical experiment, the subjects – usually children, college students, or young offenders – are exposed to a film or television program which depicts scenes of violence using cartoons or human models. After such viewings, the subjects' behaviour is observed and changes, particularly increases in aggressive behaviour, are noted.

Variables are manipulated in an attempt to establish those conditions under which imitation is most likely to take place. Thus, for example, subjects in different groups may be given different explanations of the reasons for the violence, the type of people in the film may be varied, or the circumstances in which the subjects find themselves following the presentation of the films may differ. As a result of these experiments, a great deal is known about the conditions under which different types of aggressive behaviour are learned and actually performed.

It should be noted, however, that in the context of the debate regarding the impact of film and television these studies have come in for a great deal of criticism. For the most part, this criticism is levelled on the grounds that it is presumptuous to extrapolate findings from the controlled, structured world of the laboratory to the much more complex real-life situation of film or television viewing and violent (as opposed to simply aggressive) behaviour for which there are strong social sanctions. Although there is undoubtedly truth in these criticisms, it is nonetheless true that the studies have provided an understanding of the general behavioural dynamics that are likely to be present in any learning situation of this kind – be it in the laboratory or in "real life".

There have been a number of very comprehensive reviews of the literature on this work, including several prepared for this Commission.[1] For the purposes of this study it is sufficient to highlight some of the more important findings which relate to the imitation of particular kinds of media-presented violence.

Variables Related to Imitations of Violence

It is perhaps worth emphasizing that imitation of behaviour, whether from real-life models or through symbolic means such as a film, is an established fact of learning. In its brief to the Commission, the Ontario Psychological Association states: "If there is one thing that psychologists have amply, adequately, and repeatedly demonstrated in the last several years it is that people imitate behaviour which they see demonstrated by others, regardless of whether that behaviour occurs in real-life situations or in fictitious situations. This is clearly true for both children and adults, although it is probably true that the younger the individual the more likely he is to imitate."[2]

Again, and it is of special interest to this study, these laboratory experiments have shown very specifically that media-depicted violence will, under certain conditions, not only produce violent behaviour, but structure the mode of expressing that violence. In other words, subjects will mimic the actual violence displayed.

The following factors seem to facilitate the actual learning process. Thus, the probability that an individual will learn acts of violence seen in the media are greater where:

- the model is seen to be rewarded for his violent behaviour or, at least, to avoid punishment; rewards may take the form of material gain, status, or social approval;

- the model is considered to be of a high status by those witnessing the violence;

- where the violent behaviour is witnessed in the company of others who express approval or satisfaction;

- those viewing the violence are provided with a direct incentive to imitate that violence;

- the model's violent behaviour is seen to be justified – that is, in self-defence or where alternative courses of action seem, in the context, impossible;

- the individuals viewing the violence are predisposed to aggressive behaviour or are angered or frustrated.

The characteristics of the subjects themselves seem to have a bearing on the probability of imitation. It has been found in some studies that males are more likely to imitate aggressive behaviour than females and that the younger the subject, the greater the probability that imitation will take place. In general, those from a social context in which violence is considered an acceptable part of male behaviour are more likely to be influenced by the types of violence that they see presented in the media.[3]

An important finding in a number of studies was that the greater the similarity between the real-life situation and the situation in which violence took place during the film, et cetera, the greater the probability that the learned violence will be evoked. The similarity may be between the victim of the real-life violence and the victim of the media violence. Or, where weapons present in a real-life situation are similar to those witnessed in the media, there is a higher probability that the individual will resort to violence through their use.

The focus of our present study is on the imitation of specific acts of violence. For this reason, our interest in the literature has been limited to those studies that have a direct bearing on the impact of media violence on overt behaviour. There exist many other studies which examine the impact on emotions, values, attitudes, and recognition. These are covered in the literature reviews referred to earlier in this chapter.

Chapter Three

Study Approach

We have seen in the previous chapter that studies carried out in laboratory and other controlled settings have shown that different types of aggressive or violent behaviour can be learned from watching film or television. Such studies, furthermore, showed that under certain conditions some people will be stimulated by certain acts of violence that they witness in the media to behave in a similarly violent manner.

Although this evidence clearly supports the possibility that the mass media may prompt people in real-life situations to imitate acts of violence, it does not prove that such imitations are taking place. Clearly, people can *learn* types and techniques of violence from the media – with some thought most of us could recall the details of crimes or acts of violence that we have seen on film or on television.[1] But the important question is whether some people act out the violence they have seen. If this acting-out occurs, are the dynamics of imitation identified in the laboratory applicable in situations where the variables are beyond the control of an expermenter? The answer to such questions can be found only examining actual situations.

We noted at the beginning of this report that there are indications that media violence does have an impact on the behaviour of certain members of our society – a tendency for sensational crimes of the same general type to be repeated within a relatively short time, and "confessions" that the idea for a crime came from a television program or other media source, were cited as examples. However, in some cases the connection seems questionable, for many such reports tend to be subjective. Having been sensitized to the possibility of imitation, people tend to over-generalize similarities and to use the media as an easy explanation to account for violent behaviour. Furthermore, a single well-documented incident of imitation tends to be accepted as conclusive evidence not only that imitation occurs, but that it is a widespread phenomenon, when in fact such incidents may be the exception.

Two general approaches seem possible in attempting to establish the existence of media-inspired violence. One such approach would be to try and establish the origins of the violent behaviour of those actually convicted of crimes of violence. It might, perhaps, be possible to determine what had triggered their actions, or where they had learned their particular "techniques" of violence. Such an approach is not without its problems. It places heavy reliance on the criminal's assessment of his own actions, and as Cumberbatch[2] and others have pointed out, there is a tendency in such circumstances to present simplistic and highly visible explanations to account for complex behaviour patterns. It has also been shown that subjects will tend to provide an investigator with the kind of information he is seeking – under such circumstances it would be difficult to disguise the fact that one was looking for the effects of media. An in-depth study of this nature would provide valuable information, but would necessarily take place over a long period, with careful selection of subjects and a detailed examination of the circumstances leading up to the crime in question.

It was decided to approach the study from the opposite direction – to identify specific acts of violence portrayed in the media and try to establish if there was evidence to indicate that they had been imitated. This approach has both advantages and limitations. To take the media violence as a starting point enables the scope of the study to be extended to include many different sources of information, thereby improving the chances of establishing whether imitation as a general phenomenon is widespread and whether specific acts of violence or types of violence are more prone to provoke the imitation that others. However, account must be taken of the cautions expressed earlier regarding the quality of evidence that is likely to be received; a way must be found to identify incidents in which there is a high probability that imitation is a significant element in violence.

Project Design

It was decided that the general approach to the study would be to identify a number of examples of media violence which were, in some way, so distinctive or perhaps bizarre that, should similar occurrences take place following the showing or printing of these

examples, the element of coincidence could more easily be discounted. The study would take the form of a general survey in which a number of examples of distinctive acts or types of violence drawn from the media would be widely circulated. This survey would be supplemented by a closer examination of a number of specific cases believed to have prompted imitation.

Selection of Incidents

A series of items was required that could provide some indication of the range and type of imitations that occur. Two distinct types of incident were considered:

● acts of violence depicted in dramatic presentations either in the cinema or on television;

● reports of real-life violence that received wide coverage in newspapers, television, and radio.

For the purposes of the general survey, it was decided to concentrate on acts of violence portrayed in films that had experienced some box-office success. This had several advantages:

● Such films have had wide circulation and it was assumed that the larger and more varied the audience the greater the chances that imitation would take place;

● It was assumed that, where necessary, it would be easier to establish whether those believed responsible for imitations of violence had in fact seen a film as opposed to a television program or a newspaper item;

● It would also be easier to establish the date at which the film was released to determine whether imitation was possible from a time perspective.

To meet the criterion that the violence must be distinctive enough to reduce the prbability of coincidence, a review was made of some 60 to 70 films known to contain scenes of violence or to be generally violent in theme. We were looking for acts of violence within these films which might be considered distinctive for one or more of the following reasons:

● *weapons used*: either distinctive types or makes of firearm or else truly unusual weapons, such as those associated with the Kung Fu films;

● *bizarre violence*: acts of violence which were in themselves, unusual either by the nature of the assault or by the scale of violence (as in the case of mass murders);

● *victims*: violence directed against certain categories of person – these may be children, identifiable ethnic groups, et cetera;

● *locations*: crimes which might otherwise pass unnoticed assume a distinctive quality when committed in such locations as schools, public transit systems, sports arenas, et cetera;

● *style*: acts of violence may be identifiable because of the particular mode of dress, speech, or other identifying characteristics of those commiting them.

From the films reviewed, incidents or types of violence that were considered to be distinctive and yet might permit imitation were selected from a total of 24 films. They included such items as arson, which might result from *The Towering Inferno*; vigilante crimes, which might have been prompted by the film *Death Wish*; the burning alive of victims as shown in *Fuzz*; Kung Fu sticks associated with the movies of that genre; sniping incidents as shown in *Dirty Harry*; and extortion by threats against airlines using altitude-sensitive bombs, which was the theme of *Doomsday Flight*.

A list of the incidents was prepared describing the distinctive characteristics of each incident or crime. The release date of the film was also provided. The complete list of incidents is included as an appendix to this report.

Survey Method

A letter was prepared introducing the Commission and explaining the purpose of this study. The letter was sent to chiefs of police and editors of daily newspapers in major cities in Canada, the United States, and Europe. Cooperation was requested in identifying any crimes that might be considered imitations of the incidents presented in the list. Information of two kinds was requested:

● any statistical data that would indicate changes in the occurrence rate of the specific types or acts of violence following the release of the appropriate film. Where such data were available, statistics prior to the release date were also requested in order to assess the extent of any change;

● where information was available on individual incidents, a brief account or newspaper clipping describing them. Details of the crime, the victim, and the perpetrator, as well as the date and location, were indicated as being particularly useful. If a connection between an incident and the film was suggested at the time, this information was also requested.

The purpose and approach of the study were explained in some detail so that the kind of information required would be clear to the reader. By so doing we hoped to make the exercise more interesting for respondents and at the same time to enable them to bring to our attention other incidents not included in the list but falling into the same general category. After four weeks, a follow-up letter was sent to those who had failed to reply. In a number of cases where useful information was provided, the organizations concerned were contacted by telephone to obtain further details.

Case Studies

Five incidents which, it was believed, had resulted in imitations, were selected to be the subject of more

detailed study. These incidents included two crimes of violence committed in the Toronto area which because of their unusual nature were given wide press coverage. These were:

● the shooting incident in the Brampton High School in May 1975, in which one of the students, Michael Slobodian, shot and killed a teacher and a student and wounded a number of others before turning the gun on himself. Shootings of this kind are rare in Canada and the fact that it was in a school made the incident highly unusual and no doubt accounted for the extensive press coverage.

● the fatal stabbing of a 16-year-old girl, Mariam Peters, on a deserted platform of the Toronto subway system. This murder, which took place in November, 1975, was the first to take place within the city's subway system and, as such, was truly unusual. Again, this case received a great deal of publicity.

We were interested to establish whether these crimes and the publicity they received had had any impact on the levels of violent crime or behaviour in the respective environments – schools and the subway system. We understood that both school boards and the Toronto Transit Commission kept records of such incidents and that it should, therefore, be possible to establish a baseline of any such incidents prior to the time of these particular crimes. One might then determine whether, since these dates, there had been an increase in levels of violence generally or violence involving the use of, or threats indicating the use of, similar weapons.

At the time of preparing the survey, we were aware that two of the films to be included were believed to have been responsible for a number or crimes of a similar nature. These were:

● *A Clockwork Orange*: In this film, a gang of youths committed a number of extremely violent assaults which included rape and the beating of an old man. The violence in the film had a number of very distinctive identifying features including the clothes worn by members of the gang, their preference in music, their manner of speech and the way in which the violence was carried out.

● *Doomsday Flight*: This film involved an extortion attempt on an airline by means of an altitude-sensitive bomb which was placed aboard a plane and automatically primed as the plane ascended through a certain altitude, and which would detonate when the plane descended through that same altitude. Of the many different ways that have been attempted to extort money from airlines, this approach is sufficiently unusual to be clearly identified.

It was decided that a special effort would be made to obtain as much information as possible about these particular films and the evidence for the claims that parts of the films had been imitated.

A fifth and somewhat different topic was also chosen

-- the recent assassination attempts on President Ford and other United States politicians. Some of these most recent attempts, notably that by Lynette Fromme, have led to speculation in the press that her motivation had been to use this attempt as a means of obtaining the kind of media coverage she wanted to publicize her beliefs. Inevitably, recent assassinations and assassination attempts in the United States have been given extensive coverage in the media and we were interested to establish what information we could regarding the dynamics of this particular phenomenon.

In summary, it must be stressed that in adopting this particular study approach we had to accept that the quality of data received would probably vary very significantly. This was considered very much an exploratory undertaking in which it was hoped to obtain a base of information broad enough and detailed enough to provide some insight into the extent and dimensions of this phenomenon and, perhaps, to permit speculation as to the more important dynamics involved where imitation was indicated.

Chapter Four

Study Findings: The Evidence for Imitation

We begin with a descriptive account of the response received to the survey, the additional sources of information used, and the nature of the data provided. The more interesting findings –those incidents where there seems a high probability of media-inspired violence – are then grouped by the kind of role played by the media. The next chapter deals with the findings for those cases selected for special consideration.

Nature of Response

To the original 120 letters sent to newspapers and police departments in Canada, the United States, and Europe, we received 58 replies. The best response rate came from Canadian police chiefs – 17 of the 18 police departments approached answered our letter.

Not all those who responded were able to provide information related to the purposes of the study. Some of the more typical reasons for this were:

• in a number of the smaller Canadian cities, any crime of violence is relatively unusual and the more bizarre crimes indicated in our survey are completely unknown;

• in some of the American cities, by contrast, violence is so varied and frequent that it would be difficult to identify any as being especially unusual and related to specific films or television programs;

• a number of organizations, both police departments and newspapers, did not have the resources to carry out a systematic review of files and no specific incidents could be recalled.

Many respondents expressed general concern about the issue. From the comments received in letters and attached press clippings, it was clear that many people, both police and journalists, are concerned about the potential for imitation in many of the more violent films and television programs being shown today. Not all of the respondents subscribe to this view; a number expressed the belief that "art imitates life", rather than the converse. In this connection, reference was made to the general climate of violence in the United States and to specific films or television programs which were based on actual crimes of violence. (Of course, such films may in themselves spawn imitations.)

Very little by way of statistical data was obtained from the survey or other phases of the study. It had been hoped, particularly for such crimes as arson and vigilante activities, to make comparisons of levels of crime before and after the release date of certain key movies. None of the police departments that responded to the survey kept statistics in a manner that would make this feasible. As a result, the only statistical data were approximate, e.g. "this was followed by five or six similar crimes" where the crime had previously been unknown or "car theft was something like five times its normal rate for that period". Most of the useful information received from the police departments was obtained through the personal experience or knowledge of the respondent or officers. In the newspapers, incidents were again those recalled by members of the crime staff or details of specific incidents obtained from the newspapers' files. A number were able to add to our list of distinctive crimes and the better-documented of these have been included in our account of probable imitations.

So many of the police departments reported more commonplace crimes which they had reason to believe were imitated from television programs that we have summarized their impressions with some examples in a special category of imitations.

Additional Sources of Information

A number of survey respondents provided information which was potentially interesting but required further detail to judge the probability of imitation. In these cases and also when we were aware, from other sources, of other likely incidents in the same cities, representatives of the police department in those cities were contacted for further details. In this way, contact was made with representatives of the police departments in Toronto, Montreal, Hamilton, Halifax, Edmonton, Vancouver, Philadelphia, Miami, and Los Angeles.

As part of our investigation into the impact of the Brampton high school shooting, we wrote to 60 school boards across the province and made personal contact by interview or telephone with representatives of all school boards in the Toronto area. In addition, we

interviewed members of the Metropolitan Toronto Police Force's Youth Bureau from across the city. Although the primary focus of all these contacts was on the impact of the Brampton shooting incident, all were asked if they were aware of any evidence to suggest that school children imitated or acted out the violence they witnessed in the media. The results of these inquiries are included in the next section of this chapter and also in the account of the Brampton case.

A number of interviews were held with members of the Toronto Transit Commission regarding the impact of the subway stabbing and an examination was made of the records covering "incidents" on the subway system for a period of several years.

Probable Imitations

A number of the incidents identified seemed to present a strong case for deducing that those responsible for the crimes or acts of violence had been influenced in some way by similar occurrences presented in the media.

Before these incidents are presented, the criteria used to assess probability of imitation are summarized:

- *timing*: in general the incidents occurred within days or weeks of the showing of a television program, the publication of a news report, or the release date (or in fact during the showing) of a film presented in the cinema; there were a number of exceptions to this – where, for example, a crime might require detailed planning, some special combination of circumstances were required for imitation to be possible or where the violence involved a disturbed individual whose timetable seemed governed by other factors;

- *similarity*: the incidents resembled those in the media in some distinctive or significant way; as described in the discussion of approach, the media incidents were chosen for the most part specifically because of some feature(s) that were both distinctive and unusual and only those incidents that resembled the film, et cetera, in one of these more unusual features were included;

- *confessed imitations*: for reasons explained earlier in the report, claims by individuals that they had been inspired by some television program or news item were accepted only if there were other reasons to support the "confession".

It is important to stress that imitation does not necessarily imply a causal relationship between the media presentation and the real-life violence. In grouping the incidents which are presented below, we have tried to show the kind of influence which the film or news report may have had on those responsible for the incidents. It will be clear that in some cases the decision to assign an incident to one category was somewhat arbitrary, but this categorization does provide a useful way of looking at the problem of imitation, as will be illustrated in Chapter 6.

1. *Novel Styles or Types of Violence Adopted by Members of Groups or Sub-Cultures Where Violence is Acceptable Behaviour*

In the incidents presented here it is known, or seems probable, that violent behaviour in itself is not unusual for those concerned; they belong to gangs or sections of society in which violence is at least accepted if not held in positive regard. Thus, the essential point in this category is that the individuals who witness the media violence are already predisposed to this kind of behaviour and learn to channel or express it in different ways. It is also possible that the media actually triggered acts of violence which might not otherwise have taken place – a desire to try out new ideas, et cetera, or the coincidence of a set of circumstances or conditions similar to those in the media may have actually triggered the violence.

Fuzz: This film was a police story set in the Boston area, which starred Burt Reynolds as a city detective who was trying to catch a gang of youths who had been pouring gasoline over old men described as "winos" or derelicts and setting them afire. Their motive in so doing was described as "to get kicks". The film was shot on location in Boston.

In 1973, the film was shown on one of the television channels in Boston. Two days later a young woman whose automobile had run out of gasoline was returning from a filling station with a can of gasoline when she was confronted by six youths. After dousing her with gasoline from the can, one of the youths set the gasoline afire. The young woman died some four hours later. The police were unable to locate her attackers, but believed very strongly that the film had been a contributing factor in her death. The fact that it was shown in prime time on a Sunday evening, and actually filmed on location in Boston, made it very likely that young people in the Boston area would have seen the film or, at least, be aware of its content through discussion with their peers. [1]

Although one cannot rule out entirely the possibility of coincidence, there does seem a high probability that the girl's death was connected to the film. The attack took place in a district where violence is not unusual and, while it is very possible that the girl might have been attacked anyway, the combination of the idea from the film and the opportunity – the fact that she was actually carrying the gasoline – may well have resulted in this particularly vicious but unpremeditated crime.

In Miami, some three weeks later, a wino was sleeping on a bench when four youths poured gasoline over him and set him afire. He died as a result of the burns. In this case, the police arrested the youths responsible and learned that the attack was motivated by a previous dispute with the victim. Although they denied being motivated by the film, they had seen the movie and it may well have been the origin of the idea for this mode of attack. As far as we can determine, this

type of crime was almost unknown in the United States.[2]

Walking Tall: One of the scenes featured in this film was the smashing of car windows with a large stick resembling a baseball bat.

Following the showing of the movie, the city of Windsor experienced an outbreak of vandalism in which car windows were smashed with a stick similar to that shown in the movie. Police officers talking to youths in the area learned that the act of smashing the windows was called "walking tall".[3]

Super Fly: A number of the police departments in the United States indicated that following the release of this movie many of the youth gangs in black communities adopted the style of dress and mannerisms of the movie's hero. [4]

Shaft's Big Score: Shortly after the release of this film in Chicago, three youths acted out one of the film's sequences, taking hostage a number of people and kicking and beating them. Two of the youths were shot by police, the third admitted to roles depicted in the film. [4]

Kung Fu: We received a number of reports from police departments in Canada and the United States, advising that during 1974 when the martial-arts films were at their most popular, there was a definite increase in minor assault cases where the Kung Fu sticks were used as weapons. We understand from the police concerned that those arrested were typically known to the police – the Kung Fu sticks merely represented a new weapon of assault. [5]

2. *Imitations by Children or Juveniles Involving No Criminal Intent.*

There have been many reported incidents in which children imitated the violence they had seen in television programs and films with no evidence of malicious or criminal intent; indeed, in a number of instances it is the children themselves who have suffered as a result of the imitations. For the most part, they seem to be mimicking the behaviour of characters or personalities with whom they identify or to be trying things to "see if they work".

Home-Made Bombs: There have been a number of incidents in which teenagers are reported to have constructed bombs following ideas presented in television crime shows. Two examples are:

● In May 1976, a 13-year old boy was killed when the bomb which he and a friend were making out of match-heads stuck into a length of copper tubing exploded. The Niagara Police believe the boy had obtained the idea from a police drama shown on television; [6]

● In 1976 two boys were arrested in Manitoba for being in possession of a lethal explosive. The R.C.M.P. said that the boys had learned to make the bomb, which consisted of five pounds of blasting powder in a tobacco

tin, attached to a detonator, from a recent television show. [7]

Alice Cooper: In Concert: In a 1974 concert, Alice Cooper staged a demonstration of an execution in which he was "hanged" from a set of gallows. Following this program a number of teenagers in Calgary held "hanging parties" in which they would jump from chairs with ropes around their neck – to be caught by friends. In one instance, a 13-year-old boy was killed when demonstrating this technique to his younger sister.[8]

The Kiss Group: A member of this group performed a fire-breathing act during a concert given at Varsity Stadium in Toronto. He filled his mouth with kerosene and by igniting it was able to blow fire. A 14-year-old boy, who tried to emulate the act by placing lighter fluid in his mouth, received second-degree burns to his face and temporary loss of hair and voice. Other boys have apparently tried the same act and received minor burns.[9]

This Hour Has Seven Days: In one of its programs, this documentary show included an item on glue-sniffing, in which some detail was given as to how this is done. The Calgary police report that following the program their Youth Bureau had to deal with an increasing number of glue-sniffing incidents among young people; until that time, it had been unknown in Calgary. [10]

Kung Fu Sticks: In the previous category, we reported the use of Kung Fu sticks as weapons of assault. It is also worth noting that schools around the province report that until it became known that they were prohibited weapons it was a common practice for children to carry these sticks; for the most part it was considered to be an act of bravado to carry them and only rarely were they actually used as weapons of assault. [11]

Starsky and Hutch: A 14-year-old boy, described as having a "learning disability", re-enacted a scene from this popular television program, pointing a toy pistol at a group of elderly neighbours and telling them, "Don't move. This is the police." The boy then returned to his apartment and refused to answer police calls, having heard on the radio that there was a gunman at large in his building. When the police established his identity, his parents were called and it was soon established that he was in fact "play-acting". No charges were pressed against the boy. [12]

In the same vein, many incidents were reported of children engaging in somewhat less sensational but none the less dangerous behaviour in emulation of television and film heroes. Both in our discussions with school boards and in a number of submissions received by the Commission from school personnel, we learned of the following types of incident which, we understand, are not unusual:

- boys imitating Evel Knievel trying to jump over obstacles on their bicycles;

- young children hanging from window ledges and other high vantage points, pretending to be Spiderman or Batman;

- children seen using an increasing number of "karate chops" while playing with one another.

3. *New Techniques or Types of Crime Learned from the Media*

Many of the more exciting films and television programs focus on crimes of considerable ingenuity or involve novel ways of committing more commonplace crimes. Often the technique is shown in great detail as a key element of the story. While such films or programs may provide engrossing entertainment, they have, on occasion, provided criminals with new ideas for robbery, extortion, et cetera. The incidents presented in this category are the more dramatic cases that were brought to our attention during the course of the study. In most cases the individuals concerned were already involved in crime and the police believe that, in some instances, they would have carried out the same crime but perhaps less effectively, while in other situations that particular crime might never have occurred.

Breakout: This film, which was released in May 1975, featured an escape from prison by means of a helicopter, which landed in the prison grounds at a pre-arranged time and location. In the film, the helicopter pilot was an active and *willing* participant in the escape. (It is interesting to note that the film was in fact based on an incident in which a helicopter had been used to free an inmate from a Mexican prison.)

In the beginning of June of that year a prisoner, serving time in the Jackson Prison in Michigan, was freed by an associate who had commandeered a helicopter at knife-point and forced the pilot to land in the prison grounds at a spot near where the convict was working. The two men responsible for effecting the escape were later captured and police learned that they had obtained the idea for the escape from the film. [13]

The Thomas Crown Affair: This film was shown in Montreal during the month of September 1968. The story centred on an elaborate bank robbery, the planning and execution of which were shown in some detail. As a means of distracting the attention of the security guards, a member of the gang, posing as a customer, dropped a bag of rubber balls immediately before the hold-up; when the security guards were helping to collect the balls, the bandits struck, catching them off guard.

Later that same month, a gang of armed men successfully robbed a number of Brinks' security guards [14] of $200,000, while they were entering the Place du Canada. A man carrying a paper bag full of rubber balls boarded the elevator in the basement of the building at the same time as the security guards. As the elevator left the

basement level the man dropped his bag, and as the security guards were helping him to collect the rubber balls the elevator doors opened at the first floor and the guards were attacked by two men carrying submachine guns. The Montreal police noted that the gang believed responsible for the robbery lived in the district where the film was showing. [15]

The Rookies: The Los Angeles Police Department report that three television programs aired at approximately the same time depicted incidents in which individuals robbed banks by attaching bombs to themselves and threatening to detonate them if not given money. The television programs were segments of *The Rookies*, *Ironside* and *Hawaii Five-O*. Three days after the third program was aired. Los Angeles experienced its first case of this type. Subsequently there were five or six similar incidents. It transpired that none of the bombs were real. [16]

Extortion: Several incidents were identified which took place over a period of six to eight months in 1975, in which unsuccessful attempts were made to extort money by using the threat of bombs placed in businesses, banks, a trust company, and a supermarket. In two of these incidents – one in Toronto and one in Winnipeg – the individuals concerned claimed to have obtained the idea from newspaper accounts of similar incidents, which they seem to have been able to identify in some detail. In neither of these cases were bombs actually planted, and both offenders were caught by the police. [17]

La Grande Casse: In June of 1976, this film began a long run in the cinemas in Montreal. The film centred on a group of young men who undertook to steal 100 cars in a period of four days. The film showed in some detail different ways of stealing a car, *including* opening and starting the vehicles. The car thieves were presented in an extremely favourable light, having considerable style both in their way of life and in their ability to handle cars. At the same time, the police were presented as being largely incompetent.

In the two or three months following the release of this film, the Montreal police report that car theft in certain areas of the city was over five times the normal rate. A number of youths were arrested and it was established that between them they had been responsible for the theft of more than 45 cars. They admitted that both the idea and the techniques used had come from the film, which they had seen a number of times. [18]

Rififi: This French film, made in 1954 by Jules Dassin, featured an extremely detailed account of a robbery from a jewellery store in Paris. The robbery sequence, which lasted for some 30 minutes, was considered at the time an outstanding piece of cinema.

It is interesting to read the British film censor's account of the decision-making process which persuaded them to release the film – "We took into account the fact that the robbery was accomplished only with the use of elaborate and obviously expensive

equipment, and that only the most experienced and skilled criminals could possibly imitate it; we believed, therefore, it was relatively safe." [19] When, some years later, he had occasion to talk to some prison inmates, he learned that, in fact, a number of robberies had been committed following exactly the details of the film.

4. *Imitation by those Believed to have Emotional Problems or to be "Insane"*

It is this category of imitated violence that most often makes the headlines, as it often involves the more bizarre or sensational types of violence. In many of the incidents that fall into this category, the individuals' motives remain obscure. Often they involve acts of self-destruction, and information can only be pieced together from what is known of their lives before the incidents.

Mass Killings: In July 1966, eight nurses were murdered in a Chicago school dormitory. A seaman, Richard Speck, was arrested and later convicted of the crimes. Two weeks later a student, Charles Whitman, climbed to the top of the observation tower of the Austin Campus of Texas University. Using a high-powered rifle, he shot and killed 14 people and wounded 31 others before being shot himself by the police. The enormity of these crimes inevitably resulted in extensive news coverage as papers and other forms of media provided details of the killings and tried to understand the reasons for the crimes. In November of that year, Robert Smith, aged 18, went into a beauty salon in Mesa, Arizona, and shot five women and two children in the head; four of the women and one child died. Smith waited calmly for the police to arrive and, during questioning, told the police that he had planned to carry out such a killing from the time he read of the two previously mentioned incidents. Bandura had this specific incident in mind in his discussion of "the social learning analysis of aggression", in which he tried to account for this kind of phenomenon – "Assassins in some of the mass slayings originally got the idea from descriptive accounts of a mass killing. The incident remains alive in their thinking long after it has been forgotten by others, and it is repeatedly revivified and elaborated in thought until, under appropriate instigating conditions, it serves as the basis for an analogous murderous action." [20]

As a footnote to these incidents, it may be noted that a film was made of the Whitman sniping incident in Austin, Texas, and shown on television in Toronto in the fall of 1976. Approximately two weeks after this film was shown, Ernest Lamourandire purchased a rifle and, from the top of a 24-storey apartment building in the Wellesley and Yonge Street area of Toronto, fired into the street below, injuring five pedestrians. He then turned the rifle on himself and committed suicide. This may have been a coincidence, although it is known that in the institution where Lamourandire was on the night the film was shown, some people were watching the film. It is not known, however, whether he was actually one of those watching the film. [21]

The Towering Inferno: This film centred on a spectacular blaze in a large office building, Shortly after it was released in the United Kingdom, a 16-year-old boy was arrested in Fife after a series of fires, which resulted in some $2,000,000 damage, had been started in a nearby church and school. The boy had seen the film on a number of occasions and it was a frequent topic of conversation for him. At the time of his arrest, he was planning to set fire to a nine-storey building, the tallest in the community. [22]

S.W.A.T.: A common theme in this and other television police programs is the individual who is barricaded in a building and "shoots it out" with the police. A resident of one of the communities in Washington, D.C., one Jeffrey Shufelt, for no obvious reason, barricaded himself in his apartment and telephoned the police to tell them that "he was not going to be taken alive and he'd take as many policemen with him as he could." He was killed by a police sharpshooter. His wife later claimed that he watched all the television police programs and had seen a number of the barricaded-person incidents. [23]

Kojak: In November 1976, an episode of *Kojak* presented the story of a child-molester. The following morning a 17-year-old Miami youth raped one seven-year-old and nearly assaulted a second. Members of the Miami police department were struck with the similarity between this crime and the one depicted during the previous night's program. They later arrested the youth and, in questioning him, learned that he was a *Kojak* fan and had seen the previous night's episode. [24]

Walking Tall: This film was shown on television in Hamilton during the early part of February 1976. Later that same evening the Hamilton police received a call from a man well-known to them as a result of previous incidents of violence, and considered to be dangerous. He informed the police that he had just watched *Walking Tall* and "he was going to take on the whole world the way Pusser [the film's hero] did." Over a period of hours, the police tried to reason with him, but unsuccessfully, and he was finally killed in a shooting confrontation, While the police, because of his previous history, were not surprised at this incident, they believe that the film may have actually triggered this particular confrontation. [25]

Godspell: This film was shown in Halifax in the fall of 1974. While the film was showing, a 15-year-old boy was murdered in one of the most bizarre crimes in the city's recent history. The boy's outstretched arms had been tied between two trees about five feet from the ground, and his feet tied together. He died as a result of a stab-wound in the abdomen. [26]

The Story of O: The theme of this film is the sexual exploitation of a woman referred to as "O". It involves a great deal of sexual violence in which the woman is

bound and assaulted. The film was shown in Winnipeg during the months of February through April, 1976.

The Winnipeg police report that in March of that year they arrested a suspect in connection with the rape and assault of a 14-year-old girl. During their investigations, the police discovered in the man's possession a number of cassette tapes. It was established that he had recorded portions of the film's sound track in which the woman had been beaten and assaulted. Police also discovered a number of cut-outs from *Playboy* describing *The Story of O*. It was believed that the film had triggered the assault; the man involved was later judged to be insane. [27]

A Boy and His Dog: This film is the story of a boy roaming the countryside with his dog after a nuclear holocaust. It involves scenes of sexual assault and murder.

During the period in which the film was being shown in Winnipeg, the local police arrested a man who was charged with the murder of his wife. It was determined that on returning from the cinema after seeing this film the man had sexual intercourse with his wife and then killed her. When arrested, he was leaving the city; he told police at the time that he wanted to be free like the boy in the film. The police found a pet rabbit in his car and it appeared that he looked to the rabbit as the boy did to his dog. [28]

The Exorcist, *The Omen*: Since the release of these and other movies which deal with children possessed by evil, there have been reports of a number of incidents in which parents have been arrested for particularly savage assaults on their children, claiming to believe that the children were possessed by the devil:

● In September 1976, a Philadelphia man was charged with aggravated assault following the stabbing of his three-year-old son. The Philadelphia police say that the man had apparently expressed concern on a number of occasions that his son was possessed by the devil. As far as we could establish, there was no previous history of child abuse. [29]

● In November 1976, the Baltimore police charged a couple with "trying to run down their three daughters in an automobile because they believed the children were possessed by the devil". The incident took place in the parking lot of a Baltimore hospital where the parents had stopped on their way home to New York from a visit to relatives near Washington. The police say that the couple prayed for some two hours, during which time the father attempted to "punch the devil out of his children". The girls were left on the parking lot and when they tried to follow their parents, the automobile assault took place. We have not been able to establish whether there was a previous history of child abuse in this case. [30]

(It is extremely difficult to establish the impact of these movies in the cases just described. Child abuse is, unfortunately, all too common and it is, therefore,

difficult to say whether the notion of devil-possession was used in an attempt to "rationalize" attacks for entirely different motives.)

5. *Suicide Rates as a Function of Media Reports*

In a number of the responses received to our survey, the police mentioned that they believe that the reporting of suicide in the media will often result in an increase in the general level of suicides in that particular area. A similar comment was made by the security officials of the Toronto Transit Commission.

Prompted by these comments, we examined the evidence for this as a special category. A number of specific incidents and several general studies were brought to our attention.

The French newspaper *Le Monde* reported that following the publicity given the Buddhist monks in Vietnam, who killed themselves by self-immolation as a gesture of protest and concern, a number of similar incidents occurred in different parts of Europe. Two examples were:

● a young Czechoslovakian killed himself in this manner as a means of protesting the Russian invasion of his country;

● a young worker in the north of France burned himself alive "because he was unable to accept a requirement that his hair be cut short".

This manner of suicide was so unusual that the element of imitation became readily apparent. As a result of this, the French press decided against publicizing further incidents of this nature. [31]

The reporting of a suicide in the subway system, in Toronto and other cities, had often been followed by a number of what are believed to be imitations. [32]

Film director Ted Kotcheff (*The Apprenticeship of Duddy Kravitz*) reported that in making a television play set in the London Underground, he had included an opening scene in which a man on a subway platform contemplated suicide. He ignored the advice of the subway authority that such a scene would certainly lead to an increase of suicides, but the day following the broadcast five suicides were reported on the system. [33]

Two general studies examined the relationship between media coverage of suicides and the general levels of suicide within specific cities. The first of these was carried out by Dr. Jerome Motto, [34] a psychiatrist in Detroit. The study examined rates of suicide in Detroit during a prolonged newspaper black-out (lasting 268 days) in 1967-68. The suicide rates for the same calendar period of the prior four years and of the subsequent year were examined for comparison purposes. It was noted that few changes had occurred in the city's demographic makeup or in levels of employment or racial tensions over that period of time. Results indicated "a significant lowering of the suicide rate in the female population, especially in age groups under 35". It should be noted that the same was not true

for the male population. As a result of his findings, the author calls for "a systematic effort to eliminate emphasis in the press on the sensational details of the suicide or behaviour".

In a follow-up study carried out in Montreal, Bernard Menard, a psychiatrist, and Suzanne Thibodeau-Gervais, a social worker, plotted the number of suicides in that city for a number of individual months of a six-year period against the number of newspaper accounts of suicides for the same months. Significant relationships were found to exist between the two. However, the results varied from one month to another in a way that made it difficult to make any general statements as to the nature of the phenomenon. One interesting and rather more conclusive finding was that a significant relationship was found to exist between newspaper accounts and suicide by firearms and hanging. These two methods were chosen for particular investigation as the authors assumed that there was little doubt of a genuine intention to follow through with the suicide.

In his article, Motto states that "prominent students of the suicide problem . . . agree that it is not the reporting of suicide per se but the exploitative manner of reporting that stirs the imitative impulse in vulnerable persons".[36]

6. *Some Impression of More Commonplace Imitations*

As we have noted earlier, in focusing on the bizarre and unusual in order to reduce the likelihood of coincidence, the study intentionally played down the more commonplace types of imitation, However, both in their letters and in the course of interviews and telephone discussions, the police in a number of cities (in Canada – Toronto, Edmonton, Kingston, and Windsor) specifically volunteered examples of incidents which they believe reflect the influence of the mass media. Some examples are:

The Toronto police reported the arrest of two young people for theft from autmobiles. They had been using a method of forcing entry shown in one of the American Express commercials. They apparently specialized in the same model of car used in the advertisement.

The Toronto police also told us that the influence of police shows is evident in a number of ways – for example, young people will ask to be told their rights, to see a lawyer, to be allowed to make a telephone call, et cetera.

The Windsor police have noticed that a rash of robberies from gas stations and confectionery stores will often follow reports of two or three successful robberies in a close period of time. The media then, in effect, keep "score" each time a subsequent robbery occurs. This trend may continue until someone is arrested.

The Kingston police told us of an incident in which two boys broke into a sporting-goods store after taping the window with a special kind of tape. On questioning they admitted having obtained the idea for the robbery from a television program seen several nights previously

– the same kind of tape had been used in the television robbery.

Edmonton police reported that members of the Youth Bureau are often struck by the similarity between the types of crime, *modus operandi*, style of behaviour, et cetera, shown in the police television programs and the juvenile crimes with they are regularly confronted.

Summary of Survey Responses

Regarding the films and film trends included in the survey, information was received about incidents which seemed to show a high probability of influence from seven of these films. No information was available as to the possible influence of the other films. In some cases such as, for example, *Death Wish*, the police in cities where one might expect the film to have had the greatest impact – New York, Chicago, Cleveland – were unable to provide the kind of statistical information that might have shown some relationship between the film and crimes of a similar kind.

Chapter Five

Case Study Findings

This chapter describes the results of the study of the Brampton high school shooting; the stabbing death of a young woman in the Toronto subway station; the recent presidential assassination attempts in the United States; and the films *A Clockwork Orange* and *The Doomsday Flight*. In each case a descriptive account of the incident or film is provided, together with the reasons that it was considered to be of particular importance. The reports of replication of these incidents are examined.

The Brampton High School Shooting

In May of 1975 a 16-year-old high school student, Michael Slobodian, took a gun to school after lunch period and within the space of an hour had killed one teacher and a fellow student and had wounded some 13 other students, He then committed suicide by turning the gun on himself. As a student, he had been well behaved and was described by his teachers as being very quiet in class. Based on information received from discussions with the boy's family and friends, two psychiatrists from the Clarke Institute stated that there was "no evidence that this boy suffered from an identifiable mental disorder". They further indicated that there was nothing in his behaviour that would have predicted that such a tragedy was in the making. [1]

For those concerned about the possible imitative consequences of acts of violence covered by the mass media, this tragedy was important for the following reasons:

● Shooting incidents of this kind have been virtually unknown in Canadian schools and, indeed, acts of violence resulting in bodily harm are relatively uncommon in our schools. (This is in sharp contrast to the situation in the United States where, in 1975, there were approximatly 100 murders, 9,000 rapes, and 70,000 assaults on teachers.) As a result, the incident received extensive press coverage both at the time of the incident and during the subsequent coroner's inquest. The shootings themselves were front-page headlines in the three Toronto newspapers and in the newspapers of other major centres in Ontario. Some papers devoted as many as eight full pages to the story, with headlines such as "Bloody Day in Brampton", "I'm Going to do

Some People in", "Blood all Over", "God and Michael Know Why: Slobodian's Mom". Clearly, therefore, the incident was widely known and people were made aware in some detail of the nature and extent of the violence involved.

● "Sensational" killings of this nature seem particularly prone to produce imitative kinds of behaviour, as noted in our account of the nurse murders in the United States.

● The incident took place in an environment – the school – which is clearly identifiable; furthermore, the schools are required to report to their respective boards all serious incidents involving acts or threats of violence, particularly those where weapons are involved.

For purposes of the study, we were interested to establish whether the much-publicized incident in Brampton had any impact on the number of assaults or threats of assault against teachers or students. We were also interested to discover if, after that incident, there had been reports of students bringing guns into the school. In addition, several similar shootings were known to have occurred following the Brampton shooting, These were reviewed to determine if they were spontaneous events, or influenced in some way by the Brampton shooting.

Survey of Ontario Schools

In order to establish the impact of the Brampton shooting on schools in Ontario, a survey was made of schools and school boards. Letters were sent to 60 school boards across the province, covering both the major urban areas and a number of the smaller rural communities. In the letter, the purpose of our investigation was described and reference made to the Brampton school shooting. The boards were asked to advise whether they were aware, either from their records or from specific cases, of an increase in the incidents of violence or aggressive behaviour following the Brampton shooting. In addition, interviews were held with representatives of the school boards in Toronto and the surrounding boroughs. In Toronto,

discussions were held with members of the Metro-politan Police Youth Bureau from each area of the city.

It had been the intention to collect statistical data regarding the number of incidents involving acts or threats of violence directed against teachers and students, both before and after the date of the Brampton incident, but for the reasons explained below it proved impossible to obtain reliable statistical data.

In our discussions with the boards and the Police Youth Bureau we gathered that, for the most part, the schools have discretion in determining what constitutes an act of violence serious enough to be reported. We were referred to the senior staff of several schools and they confirmed this impression. However, it was agreed that any incident involving a weapon, particularly a firearm, would be reported. Usually, a school will decide how serious an incident is in terms of the gravity of the situation and/or its implications for the future behaviour of the student. Unless there is some special cause for concern, the incident will typically be dealt with within the school itself.

For most of the boards, incidents involving acts of violence were so unusual that no summary records were necessary – the board was aware of each incident. In some cases, it was suggested that as a direct result of the Brampton shooting there was, perhaps, a tendency for teachers to report incidents which would otherwise have gone unnoticed.

The general findings of our survey were that violence in Ontario schools involving any kind of weapon or direct act of assault against a teacher or student are infrequent. Some of the boards in the major cities reported an increase in the level of generally aggressive or hostile behaviour on the part of students – an increase which has occurred over the past several years. For the most part, it seems that this expresses itself in the form of abusive language and/or gestures. Boards reported a number of incidents over the past several years in which students had attacked fellow students with some weapon, a knife or a compass, and there were reports of a number of assaults against teachers. However, these incidents provided no evidence to show that Brampton had in any way influenced the number or nature of the attacks.

Even so, the shooting did have an impact on the schools. In the opinion of the staff at some of the boards, teachers and students were distressed and anxious as a result. Students with emotional or other problems were referred more frequently for attention to guidance and counselling staff. It was also suggested that increased vigilance on the part of the staff might have averted further serious incidents before they could become dangerous. This view is not shared by everyone to whom we spoke; others pointed to the seemingly unpredictable nature of this kind of behaviour.

One shooting incident did occur in a Metro Toronto school less than four weeks before the Brampton shooting. In this case, no one was injured and it received very little publicity. There is no evidence to indicate that Michael Slobodian was influenced by this previous shooting. [2]

Student Shooting Incidents

As far as it was possible to determine, there were three shooting incidents that occurred shortly after the one in Brampton which it may have precipitated or in other ways influenced. The most serious of these occurred in an Ottawa high school, and is discussed at length.

In October 1975, some five months after the Slobodian incident, Robert Poulin, an 18-year-old Ottawa high school student, assaulted and murdered a female student in the basement of his home. He then took a gun to his school where he shot and wounded six fellow students (one of whom subsequently died of his wounds), before killing himself. The question was inevitably raised whether Poulin had been influenced by the details of the earlier incident.

No reference had been made by him to the Slobodian shooting and his own death made it impossible to question him about it. Unlike Slobodian, Robert Poulin left evidence of severe personality disturbances related in large part to the sexual fantasies which were finally acted out in the sadistic murder of the girl in the basement of his home. Again, however, it appears that there were no predictors in his behaviour of this potential for violence.

There is circumstantial evidence to suggest that Robert Poulin was influenced by the Brampton shooting. The psychiatrists who had prepared the report on Michael Slobodian were called upon to enquire into the possible causes of this tragedy. In their report they expressed concern about the sensational nature of the coverage given to the Slobodian case. As a result of the prominence and spectacular nature of this coverage, it seems inevitable that Poulin would have been aware of the events in Brampton. The psychiatrists stated in their report, "It appears to us to be more than coincidental that two such similar shooting attacks in schools could take place within a five-month period. Certainly the psychological state of Robert Poulin would make him vulnerable to suggestion and readily able to assimilate into his fantasies flamboyantly displayed news events." [3] His suggestibility is supported by the fact that pornographic books were found in his house and these may have influenced his sexual assault on and murder of the female student.

Just prior to the incident there were newspaper reports of the release from hospital of one of the Brampton victims, which may have served as a reminder of that previous event. This factor, together with the great similarity of the Poulin shooting to the Slobodian shooting, raises the very real possibility that Robert Poulin was influenced by the publicity given to the events in Brampton.

In a second incident a direct association was made by the individual concerned to Michael Slobodian. Six

days after the shooting in Brampton, an 18-year-old youth in Iroquois Falls, Ontario, shot and wounded several people using a .22 rifle. This incident did not take place within the school. The youth was arrested by the police and during his court appearance stated that he had "thought of shooting at people for some time but had never had the nerve". He stated that he had been given the courage to do so when he read the account of Michael Slobodian's behaviour in the newspaper. [4]

A third incident occurred in Dauphin, Manitoba, about a month after the Brampton shooting. A 14-year-old boy fired a shotgun into the hallway of his high school, but fortunately no one was injured. There was no indication that the boy was influenced by the Brampton shooting, although the police at the time did raise this as a possibility.

In conclusion, our survey of Ontario high schools and review of publicized school shooting incidents suggests that the Brampton shooting was at least a contributing factor in two or three subsequent gun incidents. However, at a more general level, although there may have been an increased awareness of the danger of such violent behaviour in schools, there is no indication that it resulted in a general heightening of aggression on the part of students.

Stabbing Death on the Toronto Subway System

In November 1975, a 16-year-old high school student, Mariam Peters, was stabbed while waiting for a train in the St. Patrick subway station. She died later as a result of the wounds received. There was no apparent motive for the attack. For a time after this attack, Metro police officers patrolled the stations on the subway's University line during the evening periods. This is a time when, under normal conditions, these stations are relatively quiet; during the weeks following the attack, subway use dropped and these particular stations were reported as being almost empty.

The incident received a modest amount of coverage from the local news media (certainly only a fraction of that given to the incident in Brampton). In headlines the attack was typically referred to as the "subway stabbing" and much of the news coverage emphasized the fact that it had taken place within the subway system and expressed concerns about the implications for security. Typical headlines were "Our Safe Subway Must Stay That Way", "Fear Gripping Almost Empty University Line", and "Police to Guard University Subway".

This incident was of interest to this study, specifically because of the location. The reasons for this were:

● Events that occur within the subway system seem to attract a great deal of public interest and attention. This may well be a result of the very high proportion of the city's population who use the subway on a regular basis and, coupled with that, the fact it is such a clearly defined environment, in a very real sense isolated from its surroundings in a way in which a bus, for example, is not.

● It was known from the studies of suicide (see the earlier discussion on page 71) – that publicity given to suicide in any subway system seems, inevitably, to result in a rash of similar attempts. It was considered that this might also be true for acts of violence directed against others.

● The Transit Commission keeps detailed records of all incidents of assault or attack that occur throughout the system.

Survey of Subway Violence

It was necessary to examine in detail the type and number of crimes that occurred both before and after the stabbing. This, it was hoped would indicate any clear changes in the pattern of violent crime which might be attributable to the publicity given to the stabbing. Two types of information were of interest:

● crimes similar in nature to the stabbing which might indicate direct imitation;

● an increase in violent crimes as a whole, dating from the time of the stabbing, which might indicate some relationship with the identified event.

Even though the records kept by the TTC are careful and extensive, there are difficulties which preclude a very detailed analysis:

● Not all incidents are reported to the TTC; it appears that people will sometimes go home and report incidents to the police, perhaps a day or two later. Recently, such reports have been included in TTC statistics, causing an apparent increase in such crimes.

● The classification of an incident is open to some differences in interpretation; for example, whether it is classified as with or without injury will depend upon the interpretation of the injury. As most violent incidents are minor in nature, this determination is very important.

● It is hard to check reports that have been made to the Commission, and as a result many of these are unsubstantiated. For example, in one recent case a man was charged with nuisance by fabricating a report that he was attacked, when it was later established that this had not been the case. In other situations there is reason to believe that people may perceive themselves as being attacked when they are perhaps jostled in a crowd. The Commission believes that incidents of this nature are more likely to be reported following publicity given to a more serious crime of violence; people become more sensitive and are readier to interpret hostility as being directed against themsevles; thus, a seeming increase in the reported level of violence may, in fact, reflect an increase in apprehension rather than in violence.

● The number of incidents is so small that relatively

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minor fluctuations in numbers give large percentage fluctuations, yet are statistically insignificant.

A systematic review of all available materials, corroborated by discussions with TTC security officials, indicated that the incident had no discernible impact on the level of violence within the system. Only one incident at the St. Patrick station might have had the slightest connection with the Peters stabbing. In this incident, a woman was grabbed by a man as she was leaving the subway station. She escaped uninjured. The incident was noted only because it happened at the same subway station as the stabbing.

The statistics indicate that the TTC is justified in claiming that the subway is particularly safe. In the period between 1975 and August 1976, assaults on subway passengers resulting in injury fluctuated month by month from no cases to two. Incidents of common assault on subway passengers without injury fluctuated in 1975 between a monthly low of one and a high of four. Since the beginning of 1976, however, there has been a substantial increase in the reports of common assault, reaching a peak of 13 cases in March 1976. While it may be noted that it was in January of 1976 that the much-publicized incident took place in which a man of Tanzanian origin was pushed to the tracks by two youths (see Chapter 6 for a further discussion of this incident), it must also be stressed that many of the cases reported are very minor in nature. Typically, they occur during the day when the system is crowded, particularly during rush hours, again suggesting that it may be more a case of interpretation of aggressive behaviour than of directed violence.

In conclusion, there is no evidence to suggest that the publicity given to the subway stabbing resulted in any instances of replication. However, it appears possible that the publicity may have led either to an increase in the reporting of incidents or to changes in the way some passengers perceived "incidents" which might otherwise have passed without comment.

Assassination Attempts In the United States

Since the assassination of President John F. Kennedy, there have been other assassinations and attempted assassinations of prominent political figures in the United States. Such acts have far-reaching implications of not only a political but also a social and cultural nature. Events of such national (and indeed international) import inevitably and understandably dominate the news media.

Although few would suggest that the news media should underplay the importance of such events, there has been widespread concern that this coverage plays a part in triggering similar events. As an example, in 1901, Hearst printed an attack on President McKinley which concluded that "if bad institutions and bad men can be got rid of only by killing them the killing must be done." Shortly thereafter McKinley was assassinated by a man who had a copy of the offending issue of the journal in his pocket.[5] Many different explanations have been offered to suggest the nature of the influence of publicity, and there are three principal areas of concern:

• It is thought that the publicity that is acquired by those responsible for such acts may in itself provide them with a motive; such motives may taken the form of either a need for "fame" or personal recognition or else a platform for promoting some philosophy or cause.

• Learning about these events through the media may be sufficient to prompt certain individuals to try and emulate them.

• The prominence given these events may create a general sense of instability and anxiety which will be conducive to violent behaviours that might otherwise have been kept in check.

An extensive review of the literature on different aspects of political assassination indicated surprisingly little research on the question of the possible impact of the media coverage of one assassination on subsequent incidents of a similar nature.

Media Publicity as a Motive for Assassination

If a person is seeking to draw attention to himself on a national scale, an assassination attempt (whether successful or not) against a prominent political figure in the United States is one certain way to achieve this. In the November 1975 issue of *Harper's Magazine* the editorial staff wrote,

"With a single gesture a deranged girl named Lynette Fromme, aged 26, dressed in the red robe of an imaginary religious order, had become a national celebrity. Within a matter of hours it became necessary to know about her early sorrow and unhappy childhood, about her belief in the "the People's Court of Retribution," about her squeaky voice and about her devotion to the person and murderous fantasy of Charles Manson. . . . On the following Tuesday, *Time* and *Newsweek* printed her photograph on the covers of 8,000,000 magazines, *Time* taking the trouble to buy space in the New York papers announcing "Exclusive Photos and Passages from Squeaky Fromme's Unpublished Memoirs . . . the World of the Social Misfit and Psychological Cripple . . . Fascinating, Penetrating Reading in this week's *Time*."

When, some four weeks later, Sara Jane Moore made the front pages of the U.S. newspapers for a similarly unsuccessful attempt on the life of President Ford, members of Congress and the Senate were outraged. To quote John Rhodes, the House Minority Leader at the time, "Individuals of questionable mental stability will surely begin to conclude that they too can obtain national publicity and an enlarged forum for their views . . . simply by attempting to gun down the President."[6]

There is evidence to suggest that publicity for the strange cult ideas of Charles Manson was an important part of Lynette Fromme's motivation in staging the assassination attempt on President Ford. She took every opportunity of her appearances in public to make state-

ments about Manson and her interpretation of his "philosophy". A few days before the assassination attempt she had been to the San Francisco office of UPI seeking publicity for the Manson manifesto, but it is reported that she was told to return when she had some "hard news".

The need to obtain personal recognition through the act of assassination represents the other aspect of publicity-oriented motivation. This is difficult to establish, for where the assassin's outward motives are known they are usually presented in political or ideological terms. Studies that have been done on the personality characteristics of political assassins in the United States would, however, be entirely consistent with this interpretation.

One of the shared characteristics of these people is their personal need for status – almost without exception their occupational levels were inconsistent with their aspirations or self-image. This, in company with other destabilizing factors in their personalities, would make them particularly prone to this "grand act" which in itself achieves immediate recognition for them. The role of the media in this process is to ensure that the individual receives *personal* recognition as a result of the assassination or assassination attempt.

In passing, it is interesting to note that this media preoccupation with personality may have other implications in the assassination process. In the words of Herbert Gans, "The news media encourage assassinations. They do so only in that they report personalities rather than social change, encouraging the notion that the elimination of individuals can halt social change."[7]

Assassination Coverage as a Spur to Imitation

In dealing with a phenomenon as complex as the outbursts of human violence, it is difficult if not impossible to identify precisely the role of the media in prompting acts of imitation. In the case of political assassinations, the factor of timing provides the strongest direct link. This cannot be taken as conclusive evidence, but it is an indication which justifies closer investigation.

As in the case of the mass killings, the relatively long time-lapse between the assassination incidents is not inconsistent with the notion of imitation. Berkowitz suggested that those concerned may keep alive the original event by constantly reliving it in their fantasies until, in some cases, the opportunity for imitation presents itself.[8] The number of people who have both the opportunity and the motivation to carry through this act of violence is fortunately small. Although, to set this in perspective, it should be noted that in carrying out a psychiatric study of would-be assassins, Drs. Weinstein and Lyerly were able to identify 137 subjects who, during the period 1945 to 1965, had made threats or gestures of assassination serious enough to lead to arrest and/or psychiatric evaluation.[9] Furthermore, U.S. Treasury Secretary William Symon, testifying

before a Senate Appropriations Sub-Committee in September 1975, stated that the Secret Service had received a flood of threats to assassinate President Ford. He blamed this on the publicity given to Lynette Fromme and Sarah Moore following their assassination attempts.[10]

In a study that happened to be in progress in 1968 at the time Robert Kennedy was assassinated, a social psychology research team from Columbia University dropped wallets in streets in Lower Manhattan. They discovered that an average 45 per cent of the people who found the wallets returned them to their owners within a couple of days. However, on the day Sirhan Sirhan killed Robert Kennedy, none of the wallets was returned. The research team suggested that the news of this act had damaged whatever social bonds had caused people to return those lost wallets.[11]

In an interesting study carried out in 1971, Berkowitz[12] examined the impact of President Kennedy's assassination on the figures for violent crime in the United States. His report showed that "statistical and graphic analysis of data from 40 U.S. cities indicate that President Kennedy's assassination . . . (and the mass killings of the summer of 1966) was followed by unusual increases in the number of violent crimes." He considers the possibility that these results may have been because the police reported more violent crimes, but discounts the likelihood of this on the grounds that the results were not consistent for all types of violent crime.

The hypothesis Berkowitz advances to account for this "contagion of criminal violence" effectively summarizes the contagion theorists' perception of the kind of personality dynamics involved:

. . . these incidents suggest that the following reactions occur:

"1. In many of the people seeing mass media depictions of violence aggressive ideas and images arise. Most of these thoughts are probably quite similar to the observed event, but generalization processes also lead to other kinds of violent ideas and images as well.

2. If inhibitions against aggression are not evoked by the witnessed violence or by the observers' anticipation of negative consequences of aggressive behavior, and if the observers are ready to act violently, the event can also evoke open aggression. And again, these aggressive responses need not resemble the instigating violence too closely.

3. These aggressive reactions probably subside fairly quickly but may reappear if the observers encounter other environmental stimuli associated with aggression – and especially stimuli associated with the depicted violence. The violent story might then have a relatively long-lasting influence. . . .[13]

A Clockwork Orange

Stanley Kubrick's film was released in 1970 to the accompaniment of enthusiastic reviews from the film critics. Its publicity referred to the "incredible world of Alex and his Droogs – a world of violence and terror". At the time Vincent Canby, in *The New York Times*, said that *"A Clockwork Orange"* is so beautiful to look

at and to hear that it dazzles the senses and the mind even as it turns the old real-red vino to ice. A tour-de-force of extraordinary images, music, words, and feelings."

The film was set in England some time in the near future. It focused on the activities of a gang of youths, Alex and his three "droogs," as they embarked on a quest for violence. They wore a distinctive uniform, which consisted of white shirts and pants with suspenders and black hats and boots. Alex carried a heavy walking-cane in the handle of which was concealed a long knife. In the ensuing scenes they viciously attacked an old, drunken tramp; engaged in a gang fight; drove at high speed through the country, forcing other cars off the road; invaded the home of a married couple, savagely beating the husband and forcing him to watch while they raped his wife. Finally, Alex broke into the house of a woman living by herself, and when she resisted his attack he murdered her. The remainder of the film concerns an attempt by the authorities to "cure" Alex of his violent urges through a new form of aversion therapy. Alex, considered rehabilitated, was released from prison. No longer able to respond violently, Alex was confronted by his former victims, who attacked him both physically and psychologically to the point where he attempted suicide. In recovering from his injuries, Alex realized that he was no longer influenced by the aversion therapy and the film ended with this realization.

Throughout the film Alex provides the audience with the commentary on his motives and feelings, expressing himself in a vocabulary which is distinctive and often humorous.

This film was of particular interest to the study because of the extreme violence involved and because it had a number of distinctive features associated with the violence – dress, music, and manner of speech.

Reports of Imitation

Although the film was widely distributed in Canada and enjoyed considerable box-office success, we received no indication of acts of violence that might have been inspired by the film.

We have an indirect report that in the United States a number of rapes in New York City were similar to the one shown in the film, but were unable to obtain any details of these incidents to make an assessment of the similarity.

From the reports that were received from the United Kingdom, it appears that following the film's release in that country there was a series of violent incidents that seem to have been inspired by the film. One of our respondents described the situation in these words:

Britain today is experiencing an unprecedented – and so far unexplained – increase in violent crime. Although there is no hard evidence, both police and social workers claim that a key part of the explanation is a direct link with the portrayal of crime on both television and cinema screens. Many experi-enced juvenile workers say that they have case after case of serious crime of which the motivation came from the fictional television or film items. In Britain the first real link between screen and real-life crime came after the screening of *A Clockwork Orange*. Hard on the heels of local screenings came a series of police reports of senseless and vicious attacks on innocent people.[14]

We received many individual accounts of these attacks and, in terms of the categories used earlier in the report to classify the response to the general film survey, The *Clockwork Orange* incidents in the United Kingdom seemed to reflect a number of different types of influence – from a relatively harmless juvenile modelling behaviour that aped the distinctive dress and speech style of the droogs, through new styles of violence adopted by gangs for whom violence was already an accepted part of their behaviour, to the extreme cases where there was evidence of personality breakdown. Below are a number of examples grouped according to our established categories. It is important to stress that there appear to have been many such incidents of behaviour modelled upon *A Clockwork Orange*; those described here are illustrative of many others.

1. Imitation of Juveniles Involving no Criminal Intent

Following a proliferation of *Clockwork Orange* gangs throughout the major cities of the United Kingdom, a journalist for one of the Manchester newspapers spent several evenings in the company of one of these groups to try and establish the reason for their fascination.[15] He went to a cafe where the only clientele were 14 youths dressed in bowler hats and white shirts, most wearing the distinctive eye makeup adopted by the principal character in the film. There was no indication of violence during the evening. He talked to a number of the youths about the film: "Of course, we don't hurt anyone," he was told. "But they had style. They weren't pushed around. They could hold their own in any company and weren't afraid of anyone. Of course they shouldn't have killed people, but they were living in very violent days. They had to be able to look after themselves." One of the boys he spoke to had seen the film nine times and most of the others had been to see it on at least five occasions.

The journalist reports that all those with whom he spoke had been "deeply impressed by the power of the gang and its ability to inspire terror. Not one was in any way shocked by the film's ceaseless violence and brutality."

Although this kind of imitative behaviour is harmless in itself, the violent nature of the "heroes" who served as models for this behaviour must be cause for concern. Any situation in which their heroes would have reacted with violence would place considerable pressure on these boys to behave similarly in order to be consistent with the models with whom they so closely and carefully identified.

2. Novel Forms of Violent Behaviour Adopted by Those for whom Violence is an Accepted Group or Cultural Norm

In some ways the distinction between this group and the first is somewhat arbitrary. In behavioural terms, the groups included in this category differed from those in the previous category in that their imitations actually included criminal violence. The likely explanation for this is a greater acceptance of violence in their particular social or group norms – all incidents involve unprovoked attacks often directed against strangers. In Manchester, a 16-year-old youth was convicted on a charge of causing grievous bodily harm to a 15-year-old boy. At the time of the incident he had been dressed in the "uniform" of the *Clockwork Orange* gang. Accompanied by ten other youths similarly dressed, they had attacked the 15-year-old, kicking him in the head and side and causing injuries which required a period of hospitalization. The police reported that when arrested the youth had said, "What's a good hiding? You get over it."[16]

In Scarborough, England, a group of youths were convicted of insulting behaviour, criminal damage, and carrying offensive weapons. Dressed in *Clockwork Orange*-style clothes, they walked down the main street of Scarborough carrying sticks and shouting and pushing passers-by.[17]

Four members of a gang of youths, some with criminal records, were arrested after wrecking a number of homes in the country near Chester, England. They were known to the police as the *"Clockwork Orange Boys"*, words found written in lipstick on the walls of houses they had raided.[18]

Four teenage youths in Lancashire, England, were convicted following an incident in which they attacked a young couple, raping the girl and forcing her boy friend to watch. They sang the song *Singin' in the Rain*, which was used as music during the film's rape sequence.[19]

Many reports of similar kinds of incidents involving rape or attacks on old people were received. Not all could be identified so easily with the film, however. As a result of the publicity given both the film and incidents such as those reported above, there seems to have been a tendency to identify any particularly vicious crime involving sexual assault or attacks on old people with the film.

3. Imitations that Suggest Personality Disorders

In the following incidents, there is evidence that those concerned had seen the film and were, in some way, pre-occupied with its theme of violence. There is nothing to suggest that they had engaged in overt behaviour before the incidents described.

In a Liverpool Court a teenager was convicted after an incident in which he had stabbed a man six times in the back. The same day that he saw the film *A Clockwork Orange*, the youth had had an argument with

his girl friend and had tried to persuade some friends to kill him. When they refused, "I thought I would do somebody in instead," he told the police; "I had seen *A Clockwork Orange* that afternoon."[20]

In the murder trial of a 16-year-old boy, it was established that he had seen the film *A Clockwork Orange* two weeks before he murdered a 60-year-old tramp. Having seen the film, he had purchased a copy of the book and a cassette recording of the Beethoven music featured in the film. While he was discussing the film with two friends in a pub, the tramp had been going around begging for money. The boy had what was described as a "friendly chat" with the old man, but when he left the pub the boy followed him and, in a deserted street, attacked him, beating him with bricks and a stick. The psychiatrist who was called to testify at his trial said that it was one of the most perplexing murders he had had dealings with. "I have read pages 14 and 15 of the *Clockwork Orange* book and this attack . . . is like the attack in the book. It seems to me this boy was almost acting a part which seems to be very similar to those given in *Clockwork Orange*. . . . There is nothing in this boy's past, upbringing, way of life, or character, to account in any way for the brutality."[21]

In a London *Times* commentary dealing with the impact of the film *A Clockwork Orange*, the author quotes a letter received from an advocate in Edinburgh:

My experience of the film *A Clockwork Orange* has been as follows: I have been instructed in three separate murder trials of relevance to this point, and having studied the brief prepared for my solicitors and the subsequent consultation with each of the three accused, it became clear that the accused had committed the crime of murder and in considering the possibility of the accused's fitness to plead, I explored the reasons for their action.

I discovered in each of these cases that there was a direct link between viewing the film and the imitation of the action of the main character within that film and with stereotyped patterns of violence involving precisely the same situation as had occurred in the film. On one occasion, the individuals were actually wearing the distinctive clothing which was part of the fantasy of the film.[22]

The word "brilliant" has been used on many occasions to describe this film. In an ironic sort of way, the kind of impact which has been described in these examples is testimony to its brilliance. It seems to have had a profound emotional impact both for those who saw in it an insightful social commentary denouncing violence and for those who found in it a means of expressing their own norms or fantasies of violence.

Doomsday Flight

In December 1966, a television film had its premiere on one of the American networks. The film was a well-directed suspense drama in which a man attempts to extort money from an airline by means of an altitude-sensitive bomb hidden aboard the plane. The man had constructed a bomb, the mechanism of which was sensitive to changes in air pressure brought about by

different altitudes. The bomb had been set so that it would be primed as the plane passed through a certain altitude and would detonate as the plane descended again through that same altitude. The extortionist telephoned the airline and demanded money in exchange for disclosing the precise whereabouts of the bomb aboard the plane.

The film was shown over protests from the Air Line Pilots' Association, who strongly objected to its showing on the grounds that it was "a blueprint for sabotage".[23] In a letter to the network, the Pilots' Association asked them to withhold the movie because it "could trigger an emotionally aroused and irrational mind into actual commission of an act of sabotage and provide a blueprint for it." It was believed that this particular method of extortion would be particularly appealing for the following reasons:

● the triggering mechanism was known to be effective;

● the approach enables the extortionist to make his demands from a distance (i.e. without being aboard the plane);

● it entails an immediate threat with a non-negotiable time limit, which is dictated by the fuel capacity of the plane, thus giving airlines and police little time to mount any effective counter-operation;

● given these time limits, it is difficult if not impossible to establish whether the threat is genuine and there is actually a bomb aboard the plane (making the airlines particularly vulnerable to crank calls as well as genuine threats).

Experience has shown that the pilots' fears were well-founded. Within one week of the film's release on television, airlines in the United States had received a flood of telephone calls demanding money on the same basis as that described in the film. Although extortion threats were even then not unusual, the absolute number of threats rose significantly in the succeeding weeks and a high proportion of them referred to altitude-sensitive bombs.

The film was shown on television in Montreal during 1970 and resulted in a similar incident. Within a few days of the film's showing, a British Overseas Airways 747 jet left Montreal for London. Shortly after take-off the airline received a telephone call informing them that an altitude-sensitive bomb was aboard the plane and that it would be detonated as the plane descended through a certain altitude, which was specified. Although the caller phoned the airline four times during the space of several hours, he made no demands for money or other gesture from the airline. It was apparently believed at the time that this was a hoax. However, the possibility of revenge could not be ruled out. The plane was re-routed and instructed to fly to Denver, Colorado – where the airport is situated at an altitude higher than the one indicated by the caller. (It is interesting to note, in passing, that the airline had also

learned from the movie – this being the solution hit upon by the airline in the film.) The plane landed in Denver and was searched; no bomb was found aboard. In the following year, the same film was shown on Australian television. Its showing was followed within days by a phone call to Qantas Airlines making similar demands. In this incident the extortion attempt was successful and Qantas Airlines paid out some $500,000. Again, however, it was discovered that there was no bomb aboard the plane.

When the film was later shown in Europe, similar incidents occurred. A Frenchman claimed that he had put two bombs on a Paris – New York jet liner that would explode if the plane dropped below a certain altitude. The man demanded $11,400 from TWA for defusing instructions. When he tried to pick up the ransom, he was arrested and confessed that he had not planted any bombs. *Doomsday Flight* had been shown on French television only two weeks before.[24]

Doomsday Flight provides a special example of what, during the 1960s, became an all-too-widespread phenomenon – airline hijacking. In a study, Bandura looked at airline hijackings as a special example of "the rapid rise and decline of modelled aggression". He provides the following information:

Air piracy was unheard of in the United States until a commercial airliner was hijacked to Havana in 1961. Prior to this incident there was a rash of hijackings of Cuban airliners to Miami. These incidents were followed by a wave of hijackings, both in the United States and abroad, reaching its height in 1969 when a total of 87 airplanes were pirated. Thereafter, hijackings declined in the United States but continued to spread to other countries so that international air piracy became relatively common. News of an inventive hijacker, who successfully parachuted from an airliner with a large bundle of extorted money, temporarily revived a declining phenomenon in the United States, as others became inspired by his successful example.[25]

A review of newspaper headlines of the time shows that such hijackings received extensive news coverage, especially when they were relatively uncommon or when, as in the case referred to by Bandura, they were particularly dramatic (and successful).

We understand from the International Civil Aviation Organization that attempted hijackings have now averaged out at a figure much lower than the late 1960s and early 1970s. They note also that the publicity given to such attempts tends to be much more localized and restricted.

Chapter Six

Summary and Discussion

Identifying Imitation

In the course of the study many examples of violent behaviour were identified where those responsible seem to have been influenced by similar acts of violence depicted in the media. In some cases the association between the two was relatively clear, as for example, in some of the *Clockwork Orange* incidents. In other cases, one can say only that the probability of imitation is high – based on the relative distinctiveness and infrequency of some essential element of the violence, combined with its proximity in time to the film or new item. In some cases, the probabilities were increased as a result of an obvious pre-occupation on the part of the individual concerned with a particular film, character, or event, as, for example, in the case of the young arsonist who had seen *The Towering Inferno* so many times. In addition to these more extreme examples of imitation, police departments, social workers, et cetera, find many less dramatic examples to suggest that young offenders particularly are imitating the violent behaviour of the criminal and, indeed, the police whom they see so regularly on television.

Forms of Imitation

The examples presented indicate that imitation may take many forms. A number of categories were developed to suggest the ways in which the media interact with other factors to produce the kind of behaviour exemplified by these incidents.

1. Imitation by Juveniles

Juveniles may play roles or experiment with ideas and, while it is often done out of curiosity rather than malicious intent, the nature of the behaviour imitated may unintentionally have tragic consequences.

2. Novel Types or Styles of Violence

Sub-cultures within our society for whom violence is acceptable or even desirable behaviour may learn new (and sometimes more vicious) types of styles of violent behaviour. The implication here is that the violence is an end in itself or at least prompted by in-group status or related motives. Although violence is not unusual for

these groups, in adding to their repertoire the media may have some impact on the absolute number of violent incidents – the individuals concerned find themselves in circumstances resembling those of a film, et cetera, and this triggers an act of violence that might not otherwise have occurred.

3. New Techniques of Crime

Criminals, defined here as those who engage in violent behaviour for material gain, may learn new techniques or ways of improving an existing *modus operandi*. In this category we identified crimes which the police believe would not have been carried out without the influence of the film or news report as well as those believed to have been already planned, but made more effective as a result of ideas obtained from the media.

4. Imitiations by Unstable Personalities

Those with unstable personalities (the term is used to cover a range of personality or emotional problems or disorders) may see or read of an act of violence which coincides with their own particular fantasies or which seems to provide a means of drawing attention to their needs or expressing their anger of hostility. A particular act of violence presented in the media may have taught these people a way of acting out and/or provided the motivation for them to do so.

5. Suicide

It seems that those inclined to suicide (in which the violence is predominantly self-directed as opposed to those in the preceding category who may ultimately be motivated by self-destructive urges but who first direct their violence against others) are influenced by reports of suicides, particularly where details of the method used are presented and emphasized.

It will be seen that the essential element in each of these categories relates to audience characteristics, most notably their existing orientation toward violence. The significance of this is discussed later in the chapter.

Decision Guidelines for Identifying the Imitative Potential of Media Violence

Although it is useful to know that the danger of media-inspired violence is real, it accomplishes little in practical terms unless one is able to say in advance something about how a given publicized act of violence, be it in drama or news coverage, will result in attempts at imitation.

Any "imitation" is the result of a complex interlay of forces in which the nature of the media event, the personality and social norms of the individual or group concerned, general circumstances, and specific opportunity all play a part. It is possible, however, to identify a number of factors that may increase the probability that any given act of violence will be imitated.

Factors that Increase the Probability of Imitation

The factors presented in this section include elements of content, manner of presentation and audience characteristics.

1. Use of Film Direction to Justify Violence

Some films seem structured to gain audience acceptance of violence as a legitimate solution or mode of expression. By first presenting a situation with which the audience is able to empathize, such films may establish an emotional rapport with the central figures and take the audience through a series of experiences which seem to lead inevitably to the conclusion that violence is the only solution to the characters' situation. Thus, violence may be adopted as a form of self-defence, or revenge, or perhaps to establish status or a sense of order. The violence becomes "justified" given the particular experiences and circumstances of the central characters. *Death Wish, Straw Dogs,* and *Walking Tall* are examples of films in which the director has been successful in obtaining the sympathy and, indeed, the enthusiasm of his audience for acts of extreme violence.

2. Similarity.

Where circumstances of the violence presented in the media are readily identifiable and recognizable in real life, this would seem to increase the probability that the violence will be imitated. The similarity may occur in any one, or more, of a number of dimensions:

Distinctive Weapons: Where a weapon is used, there is a danger that in real-life situations the presence of a similar weapon may serve as a cue to imitate the violence that was presented in the media. An extreme example of this may well have been the woman who was burned to death in Boston. The fact that she was carrying a can of gasoline so shortly after the showing of the film *Fuzz* could have been the cue that provoked that particular act of violence. Although one can only hypothesize, the same may well be true in situations where firearms, especially a particular kind of firearm, are associated with some act of violence. It would seem likely that the more distinctive the weapon, the greater

the chances that it will act as a cue in producing imitation.

Identifiable Victims: Where the victims of violence in the media are easily identifiable in real-life situations – for example, members of ethnic or racial groups, or even groups as general as students or children – there is again an increased danger of imitation. A current example of this phenomenon may well be the several "racial" incidents which have occurred on the Toronto transit system as this report was being prepared. Within weeks of the press reports covering the sentencing of the youths who assaulted a Tanzanian immigrant of East Indian origin in a Metro subway station, there was an assault on another East Indian in the subway system. This was followed within a matter of ten days by two other similar incidents. We know, from our study of the Mariam Peters incident, that such attacks have been virtually unknown. The emphasis on the "racial" nature of these incidents, particularly where the victim's ethnic group is given so much prominence, seems particularly dangerous from the point of view of provoking further incidents.[1]

Well-Defined Locations: Again, where the location of the media violence is well-defined and identifiable, there seems an increased risk that the violence will be imitated. To refer to our previous example, it seems more than coincidence that these racial incidents occurred within the subway system – the combination of victim and location seems a particularly powerful set of cues to prompt imitations by those disposed to violence of this kind.

Other locations where associations with violence have been made include planes and airports, which have been the victims of so many highly publicized hijackings and bomb attacks or threats. Two recent films in which the violence is closely associated with very identifiable locations are *Two Minute Warning* and *Rollercoaster*; both have caused the police some concern. *Two Minute Warning*, which featured a sniper attack in a football stadium, was released shortly before the 1976 Grey Cup in Toronto. Aware of the fact that gun shops in Toronto had received a number of requests for the very distinctive weapon used in that film, the Toronto police took no chances and covered every vantage point within the stadium that might have been used by a sniper. *Rollercoaster* involves an extortion threat directed against amusement-park owners through the placing of a bomb in the rollercoaster. The film is due for release in 1977 and concern has been expressed by both amusement-park owners and police in the United States regarding the possibility of imitations.

It seems likely that where a film or incident involves acts of violence in which a number of these factors come together, the danger of imitation may be increased.

3. Sex Associated with Violence

Based on discussions with their psychiatric advisers, the

British Film Board of Censors believes that there is a particular danger of imitation associated with media reports or films involving both sex and violence.[2] It is theorized that the high emotional impact and stimulation associated with scenes of sexual violence is particularly dangerous in the case of those individuals for whom violence acts as a compensation for sexual inadequacy. One of the few major films which have involved sexual violence with truly distinctive characteristics was *A Clockwork Orange*. It will be recalled that in the rape scene the gang cut the woman's clothing with a pair of scissors, sang *Singin' in the Rain*, and forced the victim's husband to watch. We have reported a number of incidents in the United Kingdom in which rape assaults involved one or more of these distinctive characteristics in the year following the release of the film. We have been told indirectly of similar incidents in New York City and Australia – again, shortly following the release of the film.

The advice of those who deal with or treat people with sexual disorders would seem particularly important in decisions regarding the development of release of films involving this kind of violence. Again, we quote from the British Film Censor to indicate the kind of considerations which must be taken into account:

The film *The Boston Strangler* gave us problems since it was a faithful representation of several killings by a sexual psychopath; on specialist advice from psychiatrists, we required a number of cuts to be made in order to avoid the risk of stimulation to potential psychopathic killers who might see the film. Its realism and its factual basis produced this risk, or so we were advised. I was cautioned particularly about visuals or sound of the ripping of cloth since this was potentially stimulating to men attracted by rape.[3]

Consistently with this concern, the film *The Story of 0*, whose theme was sexual violence, was not released in the United Kingdom.

4. *Realistic Accounts of Criminal Techniques*

There is now considerable evidence to indicate that people learn from the media how to commit crimes, or at least to improve their existing techniques. This learning ranges from the very precise – lock-picking techniques, et cetera – to the conceptual design and planning of such complex crimes as the jewel robbery presented in *Rififi*. It is a matter of concern to many police officers that both films and crime reports are so explicit in their accounts of the methodologies of crime. They believe that it is possible to report crime or produce crime dramas without providing what amounts to a lesson in technique.

5. *Audience Acceptance of Violence*

From the research that has been done and from the kind of results obtained in our survey, one of the most important considerations seems to be the audience's predisposition to, or acceptance of, violence. There is a much higher probability of imitation where the violence presented in the media appeals to segments of the audience whose personal or social values include an acceptance of violence. Thus, for example, in the case of *A Clockwork Orange*, *Fuzz*, and *La Grande Casse*, certain sections of the audience, notably youth gangs, were able to identify with the "heroes" of the films; without strong social inhibitions against the use of violence, the process of identification led to imitations of these models' acts of violence.

In the "average" audience, the chances that imitations of violence will actually occur are relatively small. However, it should be noted that some psychologists believe that a danger does exist even with this kind of audience. Essentially, it is believed that acts of violence are added to the normal person's repertoire of responses to given situations and under appropriate stressful or frustrating circumstances the violent solution may be adopted, particularly where the opportunity (perhaps in the form of a weapon) is at hand. One might cite as a possible example of this kind of situation the possibility of vigilante-type crimes resulting from such films as *Death Wish*. In the large industrial cities of the United States, it was reported that audiences responded with great enthusiasm to the killing of muggers by the film's hero. Clearly, this is a situation with which they would readily identify, and given similar circumstances – being attacked on the street or in the home – certain members of the audience, especially those with firearms, have been presented with a response which might well seem appealing – a fact which would be reinforced by the social approval accorded the film's hero for such activities.

Given the complex nature of the social, personality, and circumstance type of dynamics involved, it is impossible to show a direct causal relationship between media violence and violence in real-life situations. However, taken as a whole, both the evidence from controlled research studies and the information gathered during this and other field surveys indicates that media violence does play a role both in shaping the nature of, and in stimulating, violence in certain real-life situations. Furthermore, it is possible to identify factors which increase the chances that a given act of violence will be replicated or at least attempted.

With the benefit of this knowledge, the possibility exists of avoiding some of the more dangerous aspects of media presentation. It is unlikely, and indeed undesirable, that society would choose to eradicate all violence in the media – it is often an essential part of drama or news reporting. However, with the knowledge of the potential dangers of a particular film or news presentation, its importance may be weighed against the probability that it will cause harm.

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Chicago Tribune, letter to the Commission.

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10 Calgary Police Service, letter to the Commission.

11 School Board Briefs to the Commission. See for example North York School Board Survey results.

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13 Berkowitz, Leonard, op. ct., p. 239.

14 *The London Daily Mail*, letter to the Commission.

15 *The Manchester Evening News*, letter to the Commission.

16 *The Manchester Evening News*, letter to the Commission.

17 *The London Daily Mirror*, letter to the Commission.

18 *The London Daily Mirror*, letter to the Commission.

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Appendix
Survey Letter and Violent-incident List

The Royal Commission
on Violence in the
Communications Industry

Dear Sir:

We are writing to enlist your cooperation in one of the research studies being undertaken by the Ontario Royal Commission on Violence in the Communications Industry.

By way of introduction, the Commission was appointed by the Government of Ontario to study the effects on society of the presentation of violence in all the various media. A copy of the terms of reference and definition of violence are attached.

The relationship between a film and real-life incident is rarely clear-cut. Although people have been quick to connect acts of violence with similar presentations in the media, the elements of coincidence or common social or historical cause have not always been satisfactorily ruled out.

The kind of information we are looking for is described and illustrated in the attached profile. Our general approach in the study is to identify a number of film incidents in which the violence portrayed is, we believe, truly distinctive or bizarre, in terms of the act itself, the manner of its execution or the characteristics or style or culture with which it is associated. In this way the task of association is easier and, at the same time, the chances of coincidence are significantly reduced. We propose to examine all available substantiating, circumstantial and other evidence.

We are, in addition, interested in any statistical information which may indicate changes in the occurrence rate of specific types of violence following their portrayal in widely distributed films.

We would greatly appreciate any information which you may be able to provide regarding incidents which might be considered imitations of the film incidents described in our survey profile. Perhaps, you would also provide us with the name of someone within your organization whom we might contact for further details if required.

To enable us to analyze returns and include our findings in the Commission's Final Report, we would like to receive your reply by October 31, 1976. We would, of course, be glad to send you copies of both the research report and the Commission's Final Report and Recommendations.

Thank you for your cooperation.
Yours very truly,

C. K. Marchant
Director of Research

Survey of Film-Inspired Violence

Described below are a number of distinctive violent actions from recent films. We are interested to know of any incidents which may have been imitations of the film scenes described. In each case the release date of the film is provided and generally any incident occurring after this date should be considered.

We are looking for the following kinds of information:

● any statistical data which would indicate changes in the occurrence rate of the specific types or acts of violence

following the release of the appropriate films. Where these data are available, statistics prior to the release date will also be required in order to assess the extent of any change;

● where information is available on individual incidents, we would appreciate a brief account or newspaper clipping describing them. Details of the crime, the victim and the perpetrator, as well as the date and location will be particularly useful. If a connection between the incident and the film was suggested at the time, this information would be especially pertinent to our study.

Our list of violent crimes is not exhaustive but is intended to be representative of many acts of film violence. In addition, if you are aware of any other incidents of imitation of film scenes not contained in the list, we would be very pleased to receive an account of them.

Arson

The film *The Towering Inferno*, which was released in January 1975, featured a spectacular blaze in a tall office building. Although arson was not a suggested cause of this fire, the drama and publicity attached to such an incident may have prompted acts of arson. Statistics for cases of suspected arson both before and after the release of the movie might indicate an association between the film and the crimes. Any specific reference in newspaper accounts of incidents of arson and their possible link with the film would be of interest.

Vigilante Crime

Vigilante movies are perhaps as old as the Western, but in recent years a number of highly successful films have described contemporary vigilante-style crimes in the large cities of North America. These films have perhaps had extra impact with audiences because they focused attention on the muggers, pimps and drug pushers who have become features of many cities. Vigilante action may take the form of a citizen or group of citizens searching out criminals, or may more simply involve victims of crime hitting back at their attackers with unnecessary force.

There have been a number of vigilante films made recently so that it may not be easy to connect such crimes with a single film. However, the film *Death Wish* not only achieved box-office success but was also received with considerable emotion by many big-city audiences. It may therefore have prompted identifiable imitations. An increase in incidents of vigilante crime may be apparent in the months following August 1974. Accounts of these would be valuable particularly where there is suggestion of a connection with *Death Wish*.

Bodily Assault

Assault is a common crime and a common component of violent movies, both on television and in the cinemas. But some assault scenes in recent movies have been both graphic and unusual in manner and may have prompted imitations. A number of distinctive scenes are described below:

Burning Alive: In the film *Fuzz*, May 1971, teenagers poured gasoline over drunks and set them alight.

Cutting Nostrils: In the film *Chinatown*, July 1974, the hero's nostril was sliced open with a knife.

Garrotting: In the film *The Godfather*, March 1971, a particularly gruesome scene in a violent movie involved murder by garrotting with a length of wire twisted tight around the victim's neck.

Castration: Vivid scenes of castration were shown in the films *Valachi Papers*, October 1972, and *The Klansmen*, October 1974.

Decapitation: The decapitation of a corpse in *Bring Me the Head of Alfredo Garcia,* July 1974, was accentuated by the subsequent display of the head.

Murder with a Necktie: Murder by strangulation in *Frenzy*, May 1972, was accomplished by means of a man's necktie.

Rape Victims Daubed with Lipstick: In the recent film, *Lipstick*, May 1972, intended victims were daubed with lipstick by the assailant.

Running Down Pedestrians: In the film *Death Race 2000*, April 1975, car drivers deliberately ran down pedestrians.

Unusual Weapons and Fighting Sticks

Martial-arts movies featuring King Fu and karate were particularly popular between 1972 and 1974 and may have led to specific forms of imitation. This may have included the use of karate kicks and so-called Kung Fu sticks (two short sticks joined by a chain) which for a time were available from some stores.

Other films also included unusual weapons:

Shaft in Africa, July 1973, in which Shaft employed a traditional African fighting stick, and

Missouri Breaks, May 1976, in which Marlon Brando used a throwing weapon in the form of crossed spikes.

Random Mass Murder by Machine Gunning

The film *The Laughing Policeman*, December 1973, included a scene in which the passengers on a public bus were machine-gunned by a fellow passenger. In addition to incidents of this type, we would also like to hear of any threats of similar actions which may have been received.

Subway Hijacking

In the film, *The Taking of Pelham 1-2-3*, October 1974, a subway train was hijacked and the passengers held for ransom. Reports of any incidents of a similar nature with or without ransom demands, close to the time that the movie had been showing, would be of interest.

Rooftop Sniper

Dirty Harry, December 1972, featured a killer who shot people from the roofs of buildings, having first announced his intention and victims. In the film, the sniper demanded that the city authority pay him money, but any reports of sniping incidents at the time of release of the film would be of interest.

Extortion by Hostage-Taking

An elaborately planned extortion from a supermarket manager was featured in the film *Dirty Mary, Crazy Larry*, May 1974. The wife and daughter were brutally intimidated with threats of rape and murder in order to extort money from the manager. This crime has been common against shopowners and bank officials in recent years and we would be interested to know if incidents of the crime increased following the showing of the film.

Robbery of Complete Apartment Building

In the film *The Anderson Tapes*, July 1971, a gang of house-breakers attempted a multi-million dollar robbery by closing off an apartment building to the outside world and robbing each apartment. The crooks used a furniture van to move the stolen goods and dressed themselves in coveralls and leather masks. This would seem to be a crime which could be closely duplicated as the movie presented a detailed account of how such a crime might be committed.

Prison Escape Using a Helicopter

A helicopter was used in the film *Breakout*, May 1975, to airlift a prisoner from inside the prison.

Altitude-Sensitive Bomb in Airline Extortion

An extortionist in the film *Doomsday Flight*, December 1966, placed an altitude-sensitive bomb aboard an airliner. The trigger mechanism of the bomb was set automatically as the plane reached a predetermined height, and was to be detonated once the plane dropped below this height. The extortionist in the film contacted the authorities once the plane had left the ground and demanded money in return for its safety.

We are aware of several similar incidents which are believed to have been influenced by the film. Any details regarding such incidents will be of interest to us.

Alterations to Survey List for U.K.

The release dates for the films included in the survey list are as follows:

1.	*The Towering Inferno*	January, 1975 (no change)
2.	*Death Wish*	December, 1974
3.	*Fuzz*	September, 1972
4.	*Chinatown*	July, 1974 (no change)
5.	*The Godfather*	August, 1972
6.	*Valachi Papers*	January, 1973—British release title: *Cosa Nostra.*
7.	*Klansmen*	May, 1975
8.	*Bring me the Head of Alfredo Garcia*	January, 1975
9.	*Frenzy*	May, 1972 (no change)
10.	*Lipstick*	July, 1976
11.	*Death Race 2000*	January, 1976
12.	*Shaft in Africa*	September, 1973
13.	*Missouri Breaks*	July, 1976
14.	*Laughing Policeman*	May, 1974—British release title: *An Investigation of Murder.*
15.	*The Taking of Pelham 1-2-3*	December, 1974
16.	*Dirty Harry*	April, 1972
17.	*Dirty Mary, Crazy Larry*	November, 1974
18.	*The Anderson Tapes*	November, 1971
19.	*Breakout*	May, 1975 (no change)
20.	*Doomsday Flight*	December, 1966 (no change)
21.	*The Day of the Jackal*	May, 1973 (no change)
22.	*A Clockwork Orange*	January, 1972
23.	*The Exorcist*	March, 1974

Assassin's Rifle Disguised as a Crutch

The film *The Day of the Jackal*, May 1973, showed how the assassin had a rifle specially made so that it could be disguised as a crutch.

Street Gangs

In the film *A Clockwork Orange*, December 1971, street gangs wore distinctive clothing and engaged in battles with other gangs. The members of one gang wore white coveralls, black boots, and bowler hats. The music of Beethoven was popular with the leader. On two occasions in the film they tricked their way into remote country homes in order to assault, rape, and rob the residents.

Occult Movies

The recent phenomenon of occult movies is indicative of a movement which is not directly associated with any particular crime. We are interested to know, however, if there have been any incidents which can be identified as having been influenced directly or indirectly by these films. For example, *The Exorcist* received considerable public attention and may have triggered acts or threats of violence following its release in December 1973.

Studies of Television and Youth Sports

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Abstract: Studies of Television and Youth Sports

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A laboratory/field study was conducted to examine the effects of anti-social and pro-social media exposure on the behaviour of 259 children and youth engaged in organized team sports. Participants in Little League Baseball, minor lacrosse leagues, and/or a summer hockey school were included. Measures were obtained as to the at-home viewing habits and preferences of the players, their attitudes towards the sport in which they were engaged and the anti-social and pro-social behaviour of the players on the field, before, during, and after experimental treatment. The experimental treatment consisted of providing anti-social, pro-social, and control video presentations of the relevant sport to the teams assigned to these respective treatment groups. Data were also obtained as to changes in the perception of violence resulting from the experimental treatment exposure.

The results indicate that exposure to pro-social media increases the level of pro-social behaviour and of symbolic aggression. Levels of physical aggression show no consistent relationships with media exposure. Data suggest that baseball players are essentially a different population from hockey and lacrosse players. Participants indicated that they watched a considerable amount of television, and preferred sports, cartoons, and situation-comedy programs. Viewing tended to be concentrated in the evening hours. No reliable changes in the perception of violence as a result of exposure were recorded.

Recommendations are made for future research in the area of sports/athletics and media and especially for increasing the coverage of pro-social behaviour in sports/athletics telecasts.

*SIR/CAR is a registered trademark for the Sports Institute for Research/Change Agent Research, which is housed in the University of Windsor, Faculty of Human Kinetics.

Chapter One

Studies of Television and Youth Sports

This project was designed to bring theoreticians and practitioners together from the areas of higher education, research, sport athletics, and media to analyze relationships between media models of pro- and anti-social nature on sport or athletic behaviour in youth sports. The research analysis technique utilized is fully listed below under the IDEA model – identification, delineation, experimentation, and action.

Identification

The need for this particular study was well attested to by the high level of public concern reflected in commissions in both Canada and the United States, whose purposes have been to consider the effect of mass media on violence in society. We can say that previous research appears to reinforce the popular notion that television is a significant variable in the escalation of aggression and violence in North American society. In addition to determining the extent of the cause-and-effect relationship, we need a feasible operational system to moderate the negative effects of television, and indeed to turn the effect of television to work for the betterment of society. A unique aspect of this study is that it incorporated not only anti-social television input (drawn from the normal diet of North American youth), but also, pro-social media inputs (focusing on the value of skill development and cooperative behaviour).

A particular problem in the sports/athletics world has been the inability of government agencies to moderate the behaviour of professional athletic teams and the level of violence that these organizations and the viewing public will tolerate. An example of this is the William R. McMurtry report entitled, "Investigation and Inquiry into Violence in Amateur Hockey".[1] Although the recommendations contained in this report are laudable, as is the direction professional athletics and amateur sports would take if these suggestions were implemented, even the most supportive analyst must acknowledge the fact that they have had little effect to date on reducing the level of aggression and violence in either professional or amateur hockey. Certainly these recommendations do not offset the imitation of role models, the apparent glorification of anti-social behaviour by "stars", and the image of violence as a substitute for skill, et cetera, that is documented weekly in public press, radio and television and that formed the basis for concern and the initiation of this study. The communications industry is concerned about the level of violence portrayed on *Hockey Night in Canada* and other professional athletic presentations. Indeed, Ralph Melanby, the producer of *Hockey Night in Canada*, indicated that some of the anti-social behaviour is filtered out of the program.[2] In general, an objective analyst would have to assess the normal hockey television presentation as depicting an anti-social model for the youth of our country. For this reason, this research study incorporates not only an assessment of the cause-and-effect relation of violence, but a testing of the effect of pro-social television inputs that would have a high probability of being accepted by a television industry that is concerned about its responsibility to society and that is looking for negative cost Canadian content.

Basic Study Plan

The challenge of testing cause and effect *vis-à-vis* media and violence in sports or athletics, as well as evolving some direction for policy implementation, required an interdisciplinary task force with an operationalized system as well as the cooperation of those involved in the sport and athletic areas selected for investigation.

The plan for this particular study included monitoring the effect of pro- and anti-social media inputs in terms of the immediate and intermediate-term effects on three specific sport activities, namely lacrosse, hockey, and baseball. The rules of the three activities cover the full range from allowable body contact with an implement to non-contact activity. The specific research design and methodology employed is described below under "Experimentation". In general, it involved monitoring behaviour by both personal observation and media record both before and after pro- and anti-social exposure. This resulted in a strong data base of quantifiable observations. The *seeing* through media or personal observation was augmented by in-depth *audio*

interviews and *written* opinionnaires (SAW methodology), thus probing participants' existing and antecedent attitudes, beliefs, and viewing behaviours. One of the strengths of this particular study was that it was conducted during the summer, either at sports schools and/or over several weeks of sports/athletics activity, which allowed for the elimination or control of confounding variables that are present during regular playing seasons.

Delineation

Thorough computer retrieval and manual investigations into existing research and development material in the areas of aggression and violence have been conducted. SIR/CAR also had access to the 23,000 documents collected by the Director of Research for the J. Walter Thompson advertising agency in their study of media violence in the marketing industry. Therefore, the research and development conducted in this project focuses on anti- and/or pro-social behaviour in sports or athletics and, more particularly, on media audio-visual sources such as television tapes, films (Super 8 and 16mm), slides, and audio-tapes available through commercial broadcasting companies or educational media centres.[3] SIR/CAR had permission from Roone Arledge, Executive Producer, to review and replicate the extensive library of *ABC Wide World of Sports*, which is one of the most extensive in terms of the variety of sports/athletics offerings and the level of competitions available, ranging from youth sports through high-level amateur sports to professional athletics; the library contains numerous instances of anti-social behaviour and a limited number of pro-social behaviour. These sources were augmented by hockey films from MacLaren Advertising Limited, producers of *Hockey Night in Canada*, and from the Molson's Sport Film Library; lacrosse films from the Canadian and Ontario Lacrosse associations and Peterborough Cable Television; and major league baseball films. The pro-social media samples were augmented by instructional films from the Coaching Association of Canada; the American Alliance for Health, Physical Education and Recreation; and the United States National Federation of High School Athletic Associations, as well as by material from the extensive SIR/CAR library which has evolved during the past five years of research studies.

Experimentation (Evaluation)

This research design was generally utilized for three different age groups and three separate samples in hockey, spanning a period of approximately one month; three different age groups in lacrosse; and two different age groups in baseball (including one group of girls) spanning a period of one to three weeks.

The fundamental thesis investigated was the question of whether or not media input – specifically qualitatively different (pro-social and anti-social) and quantitatively different (one week or two weeks) – provides

models that significantly affect the behaviour of youths from age eight to 18 who are exposed to it. The specific hypotheses that were investigated are listed below.

The statistical package utilized was Statistical Analysis System (SAS) and Statistical Package for the Social Sciences (SPSS) with modifications provided by the University of Windsor Computer Centre. The significance level was .05. The independent variables (pro-social or anti-social television exposure) and the independent variables (social and pro-social behaviour) were as stated above. Both quantitative and qualitative analyses were utilized; that is, in addition to the specific measurements of cooperative or confrontation acts, or degree of pro- or anti-social inputs, open-ended oral interviews and written opinionnaires based on these interviews were utilized to allow some assessment of antecedent, current, and projected attitudes and behaviour not only of what is *probable* and the level of *impact*, but also of what is *desirable*.

Experimental Design

Baseball
(non-contact sport)

Experimental$_1$	O_1	X_{PS}	O_2	X_{PS}	O_3
Experimental$_2$	O_1	X_{AS}	O_2	X_{AS}	O_3
Control	O_1	X_c	O_2	X_c	O_3

Hockey
(sporadic contact)

Experimental$_1$	O_1	X_{PS}	O_2	O_3	X
Experimental$_2$	O_1	X_{AS}	O_2	O_3	X
Control	O_1		O_2	O_3	

Lacrosse
(continuous contact)

Experimental$_1$	O_1	X_{PS}	$O_2 \cdot$	X_{PS}	O_3
Experimental$_2$	O_1	X_{AS}	O_2	X_{AS}	O_3
Control	O_1		O_2		O_3

Key
O = Observation
X_{PS} = Pro-social media exposure
X_{AS} = Anti-social media exposure
X_c = Control media exposure

Hypotheses

1. There is a difference in the amount of aggresssive behaviour shown by subjects who have been exposed to an anti-social as opposed to a pro-social model.

2. There is a difference in the amount of pro-social behaviour shown by subjects who have been exposed to an anti-social as opposed to a pro-social model.

3. There is a difference in the amount of aggressiveness shown by subjects of different age levels after exposure to an aggressive model.

4. There is a difference in the amount of aggressiveness shown by subjects of different age levels after exposure to a pro-social model.

5. There is a difference in the amount of pro-social behaviour shown by subjects of different age levels after exposure to a pro-social model.

6. There is a difference in the amount of pro-social behaviour shown by subjects of different age levels after exposure to an anti-social model.

Statement of the Problem

Television pervades the life of North American children and youth. Throughout elementary, secondary, and indeed post-secondary education, approximately one-quarter to one-third of a youth's waking hours are spent watching television programming.[4] Continuing efforts by social researchers to comprehend the implications of this increasingly dominant medium on the child's development have focused narrowly on establishing the existence of a cause-and-effect relationship between television violence and the behaviour of the young viewer.

Ironically, despite the many studies that have been conducted in both the United States and Canada, few have dealt with the socially significant area of sports/-athletics, which pervades the life of the vast majority of children on the Canadian/American scene. A thorough review of the literature shows that the area of amateur and school sports has been totally ignored and that of amateur and professional athletics has been dealt with in a perfunctory way.[5] Although everyone has a firm conviction (or bias) about the relative merits or demerits of television-viewing (T/V) of sports/athletics (S/A), the fact of the matter is that virtually no research has been conducted in the area. (Lefkowitz, Walder, Eron, and Huesmann report a correlation between the amount of contact sport viewed and the level of aggression in girls, but not in boys).[6] For the most part the attitudes and beliefs of the critics of television sports-/athletics are based on prejudice, myth, and bias. We simply do not know the effect of television sports/athletics upon the behaviour of young people while engaged in sports, since:

1. little study has been done; and

2. until recently, researchers have largely ignored the pro-social effects of television-viewing.

The reason for this lack of empirically based data may be that:

1. The amount of sports/athletics television coverage was relatively small at the turn of this decade when other prominent commissions and serious studies were being conducted and were reporting on the studies of the 1960s.

2. The studies conducted in the area of sports/athletics that deal with aggression and violence have had contradictory results which, in general, show the laboratory studies supporting the learned theory (aggression and violence beget aggression and violence), while the field studies support the cathartic theory (involvement in sports/athletics, or to a lesser extent the viewing of aggression and violence reduces the need to be aggressive and violent).[7]

3. There has been a swing of the pendulum in terms of sports/athletics study/research to focus on the negative rather than the positive (after almost a century of evangelizing upon sports/athletics as an unmixed blessing).

Through these study/research projects a question arose as to the quantity and quality of sports/athletics television coverage and the nature of the content in terms of aggressive and non-aggressive projection of behavioural models. Therefore, SIR/CAR carried out the study entitled "Media Content Analysis Trends of Televised Sports/Athletics" by Colleen Valcke.[8]

The purpose of this section is to provide information and data concerning the trend of televised sports/athletics over the years 1961 to 1976. The media sports/-athletics content-analysis trend can be divided into three sequential segments. The first portion examines the trend of sports coverage on television from 1961 to 1976. The second part classifies the sports/athletics covered as either very aggressive, aggressive, neutral, non-aggressive, or very non-aggressive. Thus, the trend regarding the nature of sports/athletics televised will be reported. The third segment considers the nature of the sports/athletics televised and notes how much aggressive sports/athletics as opposed to non-aggressive sports/athletics are shown during prime-time television hours.

Hypotheses

1. There has been a significant increase in televised sports/athletics from 1961 to 1976.

2. There has been a significant increase in very aggressive and aggressive televised sports/athletics from 1961 to 1976.

3. There has been an increase in the number of hours of very aggressive and aggressive sports as opposed to non-aggressive and very non-aggressive sports televised during the prime-time hours from 1961 to 1976.

4. There has been an increase in the total number of hours of aggressive and very aggressive sports coverage during the prime-time hours from 1961 to 1976.

Operational Definitions

Very aggressive. Where there is deliberate physical injury with the possibility of bloodshed occurring.

Aggressive. Close, deliberate physical contact with a high probability of injury occurring.

Neutral. Occasional contact sport with a low probability of injury occurring.

Non-aggressive. Non-contact sport without deliberate physical contact.

Very non-aggressive. Non-contact sport, usually individual.

Nature of sports/athletics. The classification of the sports in one of the above categories denotes its nature.

Prime time. Prime time designates the largest viewing audience and has been defined as follows: Saturday and Sunday: between 1 and 5 p.m. and from 7 to 11 p.m. Monday through Friday: 7 to 11 p.m.

Method and Procedures

1. The data were retrieved from microfilm records of the *Windsor Star*. As a border city, Windsor reflects the Canadian-American interface so typical of most Ontario (and indeed Canadian) cities. Records were retrieved from the listings of local stations: CBS, channel 2 – WJBK; NBC, channel 4 – WWJ; ABC, channel 7 – WXYZ; CBC, channel 9 – CBET; and from 1967 to 1976, an independent station, T channel 50 – WKBD (included because at this time it was recognized as a local station with the same viewer-access as the other stations).

The years studied were chosen to encompass the last decade-and-a-half at three-year intervals: 1961, 1964, 1967, 1970, 1973, and 1976. In order to get a quota sample of the programs during these years, three months from each year were chosen for study: March, July, and November. From these months, the second week of each month was chosen to represent the trend occurring at that time. The week started on a Saturday and finished on the Friday following.

The total number of hours of television sports coverage is presented in Table 1.1 and Figure 1. Kendall's method of rank-order correlation was used to assess the reliability of the increase.[9]

2. Classifications of the telvised sports were arrived at through the ratings given by 30 people chosen to represent the spectrum of sports/athletics fans: men and women; students and non-students; children, youth, and adults; and businessmen and factory workers. They were asked to rate the sports as they perceived them (according to the author's operational definitions). The number of hours allotted to each category is shown in Figure 2. Table 1.2 compares the number of hours of very aggressive plus aggressive sports and the number of hours of non-aggressive plus very non-aggressive sports by year. (The number of hours are summed over March, July, and November to provide an over-all measure for the year.) Sports that are rated neutral are not included in this table. These data are presented graphically in Figure 3. Kendall's

Tau method of rank-order correlation[9] was employed to determine whether there was an increase over the years in the number of hours of very aggressive and aggressive sports (showing a sizable though non-significant relationship of t.33)

Table 1.1

Number of Hours of Televised Sports, 1961-1976

Year	1961	1964	1967	1970	1973	1976
Number of hours	63.18	64.75	101.50	73.50	90.55	96.75

Non-parametric correlation* = .60 $p < .10$
* Kendall's Tau, see note 9 for source.

3. The third hypothesis concerned the number of hours of prime-time coverage allotted to the various sports categories. The number of hours of very aggressive and aggressive sports were summed, as were the number of hours of non-aggressive and very non-aggressive sports. Data are presented in Table 1.3 and Figure 4. In order to test this hypothesis, the difference between the number of hours in the aggressive categories and the number of hours in the non-aggressive categories was calculated. These values were then correlated with the years in order to obtain an index of the degreee to which there has been an increase in the proportion of aggressive and very aggressive sports over time. A non-parametric correlation of −.20 (non-significant) was obtained.

4. The fourth hypothesis concerned the absolute number of hours of aggressive and very aggressive sports coverage during prime time over the years studied. The data were summed over these two categories and over the three months for each year. The data are presented in Table 1.3 and Figure 4. The non-parametric correlation obtained is + .47 (non-significant).

The data indicate that there was an increase in the absolute amount of sports coverage over the years studied and a moderate trend towards an increase in the amount of aggressive and very aggressive content. Regarding prime-time coverage, the data show an overall increase in the number of hours of aggressive and very aggressive sports over time, but a slight decrease in the proportion of these categories. Taken together, these findings indicate that while the coverage of the aggressive categories has increased both overall and during prime time, the coverage of the non-aggressive categories of sports has at least kept pace.

Figure 1

Trend of Televised Sports, 1961-1976
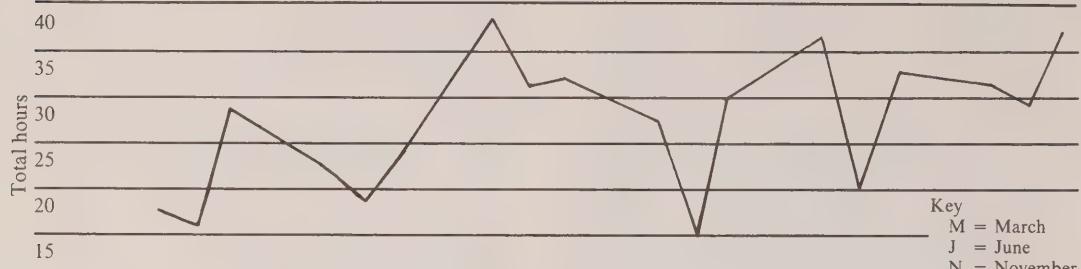
Figure 2

Trend of the Nature of Sports Televised, 1961-1976
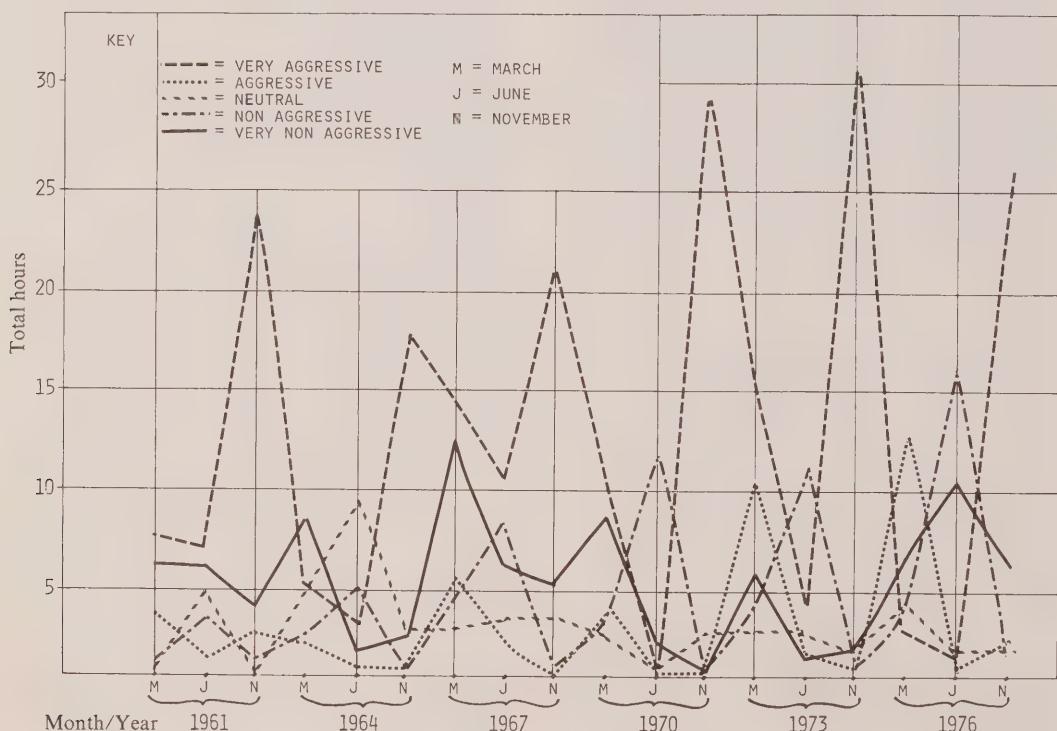
Table 1.2

*Total Hours of Televised Sports, Comparing,
Very Aggressive and Aggressive to Non-Aggressive
and Very Non-Aggressive, 1961-1976*

Nature of sports			Year			
	1961	1964	1967	1970	1973	1976
Very aggressive and aggressive	43.25	28.50	54.50	43.00	62.00	43.75
Very non-aggressive and non-aggressive	20.60	20.25	37.50	26.50	23.80	46.25

Non-parametric correlation* = .33 (non-significant).

* Same as Table 1.1.

Table 1.3

*Total Hours of Televised Sports Viewed at Prime Time
Comparing Total Hours of Very Aggressive and Aggres-
sive to Very Aggressive and Non-Aggressive, 1961-1976*

Nature of sports			Year			
	1961	1964	1967	1970	1973	1976
Total VA	36.25	23.00	50.00	39.00	56.25	40.75
Total VNA and NA	9.34	11.75	26.00	19.50	21.75	38.25
Difference (VA + A) − (VNA + NA)	26.91	11.25	24.00	19.50	34.50	2.50

Non-parametric correlation* for proportion of very aggressive and aggressive = −.20 (non-significant).

Non-parametric correlation* for increase in very aggressive and aggressive during prime time = +.47 (non-significant).

* Same as Table 1.1.

Figure 3

*Total Hours of Televised Sports, 1961-1976, Comparing Very Aggressive and Aggressive
to Non-Aggressive and Very Non-Aggressive*
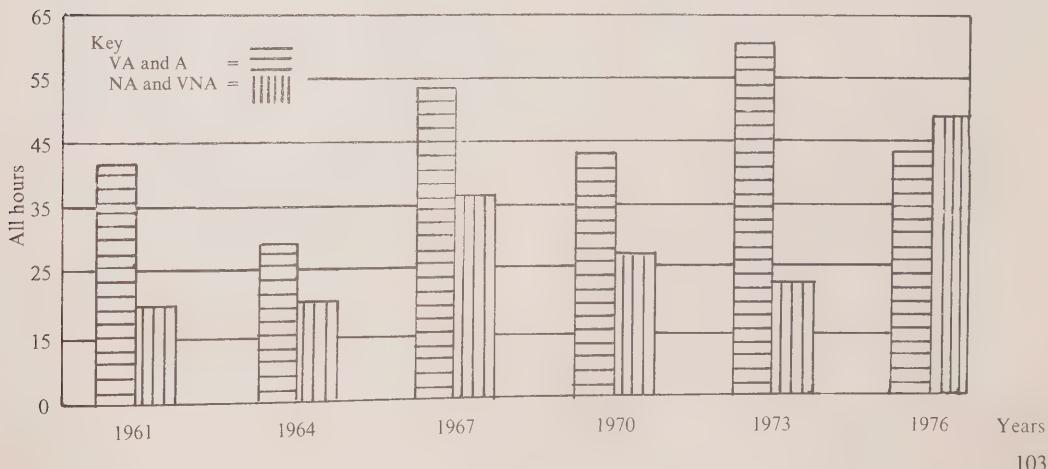
Figure 4

Total Hours of Televised Prime Time Sports—
Very Aggressive and Aggressive Versus Very Non-Aggressive and Non-Aggressive—1961-1976
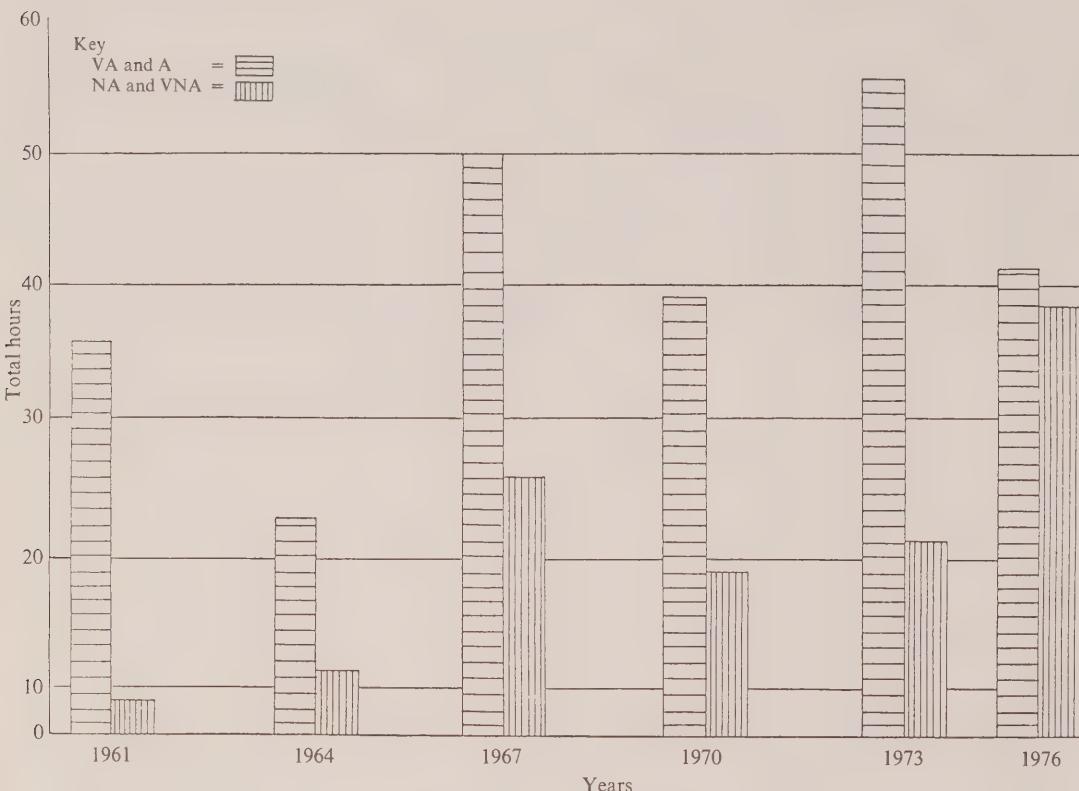
Chapter Two

Research Design

This chapter outlines the specific research design as well as the method of collecting and analyzing the data. In a general way, this study falls in the area of laboratory/field experimental research in that the subjects were exposed to pro-social and anti-social television- viewing presentations in their sports (baseball, lacrosse, and hockey) and their behaviour was monitored before and after exposure by the *seeing* personal-observation team. In addition, any changes in the perception of aggression or violence were pre- and post-tested, utilizing binocular rivalry. Survey and descriptive research was involved through the *audio* and *written* opinionnaires, which provided the subjects with an opportunity to indicate their attitudes, beliefs, and behaviour not only in television-viewing but also in their sports participation and in their perception of the attitudes and behaviour of significant others (parents) towards their television-viewing habits. The behaviour of the subjects while viewing the television treatment was monitored by the *seeing* media project team (slides and portable videotape units) as well as by the *seeing* personal-observation team which recorded facial reaction to the television-viewing treatment as well as positive and negative verbal reaction.

The distinguishing independent variable was exposure to approximately one hour of either anti-social or pro-social sports/athletics films drawn from either the professional or high amateur levels. The dependent variable was the physical and verbal behaviour of the subjects. In an effort to control confounding variables, the study was conducted in a laboratory/field setting either early in the regular season of play (baseball) or in sports/athletics summer schools or leagues focusing on instruction as opposed to competition (lacrosse and hockey). By virtue of this field setting, the principal investigators were able to eliminate one of the major potentially confounding variables, namely the evolutionary increase in aggression and violence as the regular season proceeds from early to late play-offs and/or tournaments.[1]

Data of both a quantitative and qualitative nature were involved, and, therefore, a spectrum of statistical analysis techniques was utilized. Computer analysis employing the Statistical Package for the Social Sciences (SPSS), which is predominantly a non-parametric system, was utilized for some of the data of the *seeing* personal-observation participation, the television-viewing project team, the binocular-rivalry tests, and the written opinionnaire. In addition, parametric analysis was utilized in the *seeing* personal-observation participation and the binocular-rivalry data. The .05 statistical level of significance was utilized throughout (although some of the more significant trends and results up to the .10 level are reported). Correlational techniques were utilized to assess the associations among the various dependent and independent variables.

Task Force Model and Methodology

Approximately one month was devoted to the finalization of instrument development and to liaison with the sports/athletics organizations (May); roughly one month each to collecting the data in each of the sports (June to August); and approximately four months to processing and analyzing the raw data and to writing up the final report (September to December).

The task force agreed upon the modified SIR/CAR Sports/Athletics Model and Method listed below. As can be seen from the vertical axis, the focus of attention was upon the child/youth in sports/athletics. In terms of the child/youth subjects, consideration was given to such variables as age; sports/athletics and television-viewing behaviour; perceptions of aggression and violence; sports/athletics and television-viewing disposition and priorities; attitudes and beliefs on professional athletics versus amateur sports; and child/youth and parental motivation, behaviour, and interaction in viewing television.

Column B lists the sports/athletics activities (baseball, lacrosse, hockey, and women's baseball) in which the children/youth were involved and in which they received the media models (pro-social and anti-social).

Column C lists the specific methodology which was utilized, mainly:

1. seeing participation in sports/athletics by personal

observation and media-monitoring of physical, verbal, and non-verbal gestures as well as facial behaviour;

2. television-viewing behaviour, which monitored facial behaviour as well as vocal positive and negative response to both pro-social and anti-social television presentations;

3. binocular-rivalry testing for changes in the perception of aggressive and non-aggressive behaviour;

4. oral and written opinionnaires including: (a) identification and motivation data for sports participation and television-viewing preferences; (b) professional athletics versus amateur sports disposition; and (c) the Television Diary on Aggression Index identifying what children/youths view on television and why, and how their parents react.

Project teams were organized to carry out each of these four phases of the study. In addition, there was a project team for television media treatment responsible for securing, categorizing, and showing the television treatment tapes.

Definition of Terms

One of the first challenges for the task force was to agree upon a definition of terms. After extensive discussion, the following guidelines were adopted:

1. *Pro-social behaviour* in television models and sports/-athletics participation. In general, it was agreed that this encompassed socially accepted acts that children/youth are generally encouraged to display in our society. It was the general consensus of opinion that the potential for television to contribute to pro-social learning, although recognized in recent years, has to a large extent been ignored. Pro-social behaviour or attitudes were envisaged as including altruism, sympathy, courtesy, reparation, and affection, defined as follows:

(a) *altruism* – regard for the interests of others, as expressed through sharing, cooperating, helping, encouraging, and teamwork.

(b) *sympathy* – positive feelings for another's plight, expressed in terms of concern, compassion, pity, and caring.

(c) *courtesy* – verbal and behavioural displays of respect or deference for others, including taking turns, holding doors, waiting in line, thanking, and minding.

(d) *reparation* – the communicative act of correcting a wrong committed against another, involving confession, contrition, or apology.

(e) *affection* – an overt physical or verbal expression of positive feelings towards another, including compliments, hugging, and shaking hands.

2. *Anti-social behaviour* in television models and sports/-athletics participation:

In general, it was agreed that this would encompass

socially unacceptable acts that children are generally discouraged from displaying in our society. Anti-social behaviour included excessively aggressive or violent behaviour in sports/athletics. The question of anti-social behaviour as an effect of television violence has of course been studied in hundreds of investigations and debates. "Almost everyone accepts the conclusion that under some circumstances, watching violence increases the likelihood of some form of aggression."[2] Anti-social behaviour can be defined broadly to include desensitization to the suffering of others, withdrawal from social situations, et cetera, which may also be affected by media portrayals.[2] Assuming, however, that in contemporary terms anti-social behaviour is primarily looked upon as aggressive or violent behaviour, the emphasis was placed on the monitoring of active physical aggression, verbal aggression, and non-verbal aggression (gestures, et cetera).

Monitoring of Participation in Sports/Athletics

The observation of the behaviour of players involved recording the number of incidents of four categories of aggressive and pro-social behaviour within a given playing segment. Physical aggressive behaviour included the pushing, hitting, bumping, et cetera – either with the body or with an implement – of another player, official, or coach by any player of the team being observed. Verbal aggressive behaviour included any utterance by a player of the team being observed that would likely be interpreted by the recipient as negative comment. Non-verbal aggressive behaviour included acts that although not verbal, were symbolic in nature. These included acts that could be interpreted as threatening physical aggression, such as holding a clenched fist in another's direction, and stylized gestures, such as "thumbs down". Pro-social behaviour included any physical or symbolic act directed at another that would likely be interpreted by the recipient as supportive, encouraging, or approving.

Observation periods were defined separately for the three sports. In baseball, each team was observed for each inning of the game, and then an average of the number of incidents in each of the categories of behaviour per inning was computed for each of the teams. Lacrosse teams were observed for each of the periods of play and an average was then computed of the number of incidents of each type of behaviour per period for each team. Hockey groups were observed for 20-minute periods on the ice, and averages of the number of incidents of each type of behaviour were computed for each of the activities for each group. For the final analyses of the data, a single mean score on each of the classes of behaviour was calculated for each team by averaging over all the game observations for that team.

These manipulations were necessitated by statistical considerations. They resulted in a rather small number

Sports/Athletics (S/A) Participation and
Television-Viewing (T/V) Model and Method

Column A

Child/Youth
Variable, Such as
Age/Sex/Team/
Socio-Economic

Roles and Behaviour

Column B

Sports/Athletics
Activity and T/V Treatment:
Pro-Social
Anti-Social

S/A and T/V

Column C

S/A and T/V

Column A	Column B	Column C

1. S/A behaviour	Baseball
	(a) boys
	(b) girls
		1. Seeing participation
		 (a) personal observation
		  (i) physical
		  (ii) verbal
		  (iii) non-verbal (gestures)
		  (iv) faces 😊 😐 ☹
		 (b) media monitoring

2. T/V behaviour	Lacrosse
	
	Hockey
		2. T/V behaviour
		 (a) personal observation
		  (i) faces 😊 😐 ☹
		  (ii) vocal + and –
		 (b) media
		  (i) slides
		  (ii) T/V

3. Perception of aggression and violence	Manifestations: pro-social and anti-social	3. Binocular rivalry (a) aggressive (b) non-aggressive
4. (a) S/A and T/V Disposition and priorities Wants and needs 4. (b) Attitudes and beliefs Professional athletics versus amateur sports 4. (c) Child/youth and parents' motivation (ignoring/noticing, opposing/helping)	Quantity Quality Height of television Duration Frequency Scope	4. Oral and written (a) Opinionnaires identification and motivation: S/A and T/V (b) professional athletics versus Amateur sports disposition (c) T/V Diary 😊 😊 ☹ Aggression Index— What, why, and interaction of child/youth and parents

of observations for analysis, but also provided measures which can be considered highly stable and reliable.

Monitoring Television-Viewing

The project team that monitored the behaviour of children/youth while viewing the pro-social or anti-social treatment television films focused more specifically on verbal and non-verbal behaviour than on physical behaviour. The facial reaction of the subjects was recorded every three minutes of the film (happy, neutral, and frowning)[3], and between each facial observation all positive and negative verbal comments were recorded.[4]

Selection of Media Presentations

In categorizing films as showing pro-social or anti-social behaviour, the frequency of obvious pro-social and anti-social manifestations was observed and then categorized on a one-to-ten scale of aggression (with non-aggressive equal to one and aggressive equal to ten). The cumulative score allowed rough categorization of the films as either anti-social or pro-social. In addition to the frequency of acts considered, duration of time and intensity were also taken into consideration. In a general sense, confrontation was considered as anti-social and cooperation as pro-social.

Sports/athletics do not allow an absolute standard for behaviour, since the nature of different sports/athletics and their rules accommodate varying levels of physical contact which ultimately allow greater or lesser amounts of inevitable physical and verbal aggression. For example, because of the rather low frequency of physical contact in the game of baseball, anti-social behaviour is frequently expressed by verbal aggression; whereas, hockey competitors are more prone to physical aggression. Spectators in both activities depend primarily upon verbal aggression (although sporadic physical violence in the stands is becoming more common). The following elements were considered in determining the pro- or anti-social nature of the sports films:

– cooperation or lack of cooperation with team members and opponents

– verbal aggression towards team members, opposing team members, coaches, referees, or umpires

– team cohesion displayed by encouragement and reassurance of performance

– team alienation displayed by disapproval and condemnation of performance

– general sportsmanlike or unsportsmanlike behaviour

– general attitude of players (friendly or hostile)

– positive or negative reinforcement by coach or manager

– crowd reaction (supportive or non-supportive)

– any direct acts of physical violence

In addition, the positive or negative nature of such variables as intra- and inter-team interaction, as well as the interpersonal transactions among or between players, coaches, spectators, and officials before, during, and after games were taken into consideration. Once the project members had categorized the films (and/or in some instances edited them) as pro- or anti-social, a panel of experts from the school, amateur, or professional sports/athletics groups was brought in to view the videotapes and to rate them on a scale of one to ten as either pro-social or anti-social. There was 100 per cent agreement between the sports/athletics practitioners and the university research and project members on the categorization into pro-social and anti-social films; and further, the ranking on a one-to-ten scale showed a correlation of approximately .80. Shows were videotaped by the University of Windsor Media Centre and are now maintained in the project's video library. Videotapes presented as treatment are listed below:[5]

Table 2.1:

Videotapes Presented by Treatment Condition

Pro-Social	Anti-Social
Hockey	
1968 Stanley Cup Cut #I (25 min.) St. Louis vs. Montreal	1969 Stanley Cup Cut #II (25 min.) St. Louis vs. Montreal
1975 Stanley Cup (25 min.) Philadelphia vs. Boston	1973 Stanley Cup (30 min.) Boston vs. Montreal
Lacrosse	
Lacrosse—Cut #I—*The Fastest Game on 2 Feet* (14 min., 16 mm and videotape)	Minto Cup Lacrosse (28 min., videotape) Mississauga vs. Burnaby
Lacrosse—Cut #II—*Lacrosse Is Everybody's Game* (14.5 mins., 16 mm and videotape)	Mann Cup Lacrosse, Part II (12 min., videotape) Vancouver vs. Peterborough
Mann Cup Lacrosse, Part I (60 min., videotape) Vancouver vs. Peterborough	
Baseball	
1974 World Series (27 min.) Los Angeles vs. Oakland	1969 World Series (27 min.) New York vs. Baltimore
1975 World Series (37 min.) Cincinnati vs. Boston	1972 World Series (40 min.) Cincinnati vs. Oakland

Chapter Three

Professional Athletics/Amateur Sports Participation (S/A) and Television-Viewing (T/V) – Pro-Social and Anti-Social Models

In order to understand the traits, situations, and behaviour of the children/youth involved in this study, the written opinionnaire survey was administered to identify the sports/athletics and television-viewing habits, attitudes, beliefs, and behaviour of the subjects. This collection of baseline and exploratory survey data was to provide an initial "shake-down" of the variables and to isolate those variables that account for the bulk of variance of behaviour influenced by other television-viewing and/or sports/athletics participation. Approximately one month was devoted to developing, testing, and finalizing the opinionnaire. Subsequently, the opinionnaire was printed, distributed, and retrieved at the initial meeting of each sports/athletics group, and subsequently processed. Full details of the process involved and the results obtained are contained within this chapter.[1]

Preparation of the Project Team for the Study

Three honours undergraduate project leaders were selected on the basis of their previous experience with SIR/CAR studies. Each of these leaders acted as a liaison person with either a baseball, lacrosse, or hockey group and were in charge of developing and distributing a written opinionnaire.[2]

The three project leaders studied opinionnaires from previous projects in order to select the most pertinent items for inclusion in the present opinionnaires. The items were further developed by the members, making them pertinent to the *types* of television programs the children/youth watched in order to find out *why* they watched them and *how* their parents felt about these programs.

On-Site Training and Adjustment

The initial opinionnaire was pilot-tested and revised as indicated below. Similarly, the distribution and retrieval of the opinionnaire were adjusted to suit each given situation. When subjects were too young to read the opinionnaires, it was read to them, and the meaning of difficult words was explained. Older subjects were given the opinionnaire to do on their own, but supervisors were always present to answer any questions and to

collect completed opinionnaires. In the case of little league baseball, opinionnaires were distributed at two different grade-school gymnasiums. Opinionnaires were distributed in the lobbies of the arenas to both the lacrosse players and the hockey players.

Principal investigator Dick Moriarity conducted in-depth audio follow-up interviews with a random sample of children/youth who had filled in the opinionnaire. During the course of the interview, the subjects were asked to indicate:

1. what the question meant to them

2. what their response had been

3. what their response meant

These audio tapes were shared with the other principal and associate investigators and all were satisfied as to the validity, reliability, and objectivity of the instruments.

Number of Project Members

Three project leaders were assigned to the audio-written portion of this study. Three television personal observers also helped in the distribution and retrievel of the questionnaires/opinionnaires.

Procedure for Collecting Data

The final opinionnaire included questions dealing with the following:

1. what the players liked *most* about their sport

2. what the players liked *least* about their sport

3. the number of hours the players watched television

4. the type of show the players liked

5. whether the players were *amateur-sports* or *professional-athletics* oriented[3]

6. a listing of the television programs they watched on a particular day

7. *how often* they watched the program, *why* they watched the program, whether their *parents liked* the program or not, whether their parents watched the

program, and how the *players felt* after watching the program[4]

The questionnaire can be divided into three major sections:

1. The player's questionnaire provided identification information such as the age and sex of the subject, the sport involved, and the number of hours and the time of day that the subject watched television during the summer and winter; as well the subject then ranked the type of programs that he liked *best* and *second-best*, his *first-* and *second-* preference sports programs shown regularly on television and his first- and second-preference sports programs shown occasionally on television.

2. The Project Competition Concern provided an opportunity for respondents to express their attitudes and beliefs in terms of their support for professional athletics (quality greater than quantity) as opposed to amateur/school sports (quantity greater than quality) by means of 13 forced-choice questions dealing with such variables as ultimate goal, aim and objective, time commitments, and emphasis in player selection.

The Television Diary Index allowed a listing of actual television programs that had been viewed by the subjects, as well as a statement as to the frequency, motivation, and feeling of the subjects while viewing these programs and the attitude and behaviour of their parents while the subjects were viewing these programs.

Location on the Site

1. *Baseball.* The opinionnaire was distributed in either the Coronation or William Davis public school gymnasiums to the entire sample of baseball players.

2. *Lacrosse.* The opinionnaire was distributed in the Adstall Arena lobby after game sessions, to the various age groups of lacrosse players, that is, tyke/novice, pee wee/bantam, and midget/juvenile.

3. *Hockey.* The opinionnaire was distributed during lunch breaks at the St. Clair Beach Arena to the various groups of hockey players, that is, Group A (low-skill level), Group B (average-skill level), and Group C (high-skill level). These groups corresponded roughly to age groups.

Project leaders, helped by members of personal observer and media project teams distributed and collected the opinionnaires at the various locations.

Treatment of the Raw Data

The results of this analysis were recorded on actual copies of the opinionnaire for each of the groups or subgroups listed below:

1. over-all results – N = 259, including all subjects from baseball, lacrosse, and hockey

2. hockey – N = 152

3. lacrosse – N = 45

4. boys' baseball – N = 44

5. girls' baseball – N = 14

The difference in the size of the sample for each of the sports involved is a reflection of the size of the population. Hockey provided the largest population and therefore the largest sample, followed by boys' baseball and lacrosse. Hockey players provided something of a captive audience, since they were attending the school from 9:00 a.m. to 4:00 p.m. Lacrosse and baseball teams were non-captive and not all players completed the opinionnaires. Little league baseball for girls is in the early stages of development in the Windsor region. Only one league exists at present, which necessitates considerable cross-city travel for these players. Since the completion of the opinionnaires and the provision of the media treatments took place at other than the usual game times, extra travel was involved for the girls. Presumably, as a consequence of this requisite extra effort, few girls appeared to complete the opinionnaire. Their data are provided, however, as suggestive of trends. Few girls also appeared later for the media-treatment sessions. Thus, no results for the media treatment are available for the girls.

Identification Sports/Athletics
Participation (S/A–P) and Television-Viewing (T/V)

Player Questionnaire—Over-all

1. Age____
$\bar{X} = 12 \pm 5$, median = 12 mode = 11, min. = 5, max. = 20

2. Sex (a) male
      (b) female

3. Sport_____

4. Team name_____

5. What do you like most about your sport?
(a) skills = 22% (b) game itself = 17% (c) action = 16% (d) rewards = 15% (e) fun and enjoyment = 11% (f) aggression = 9% (g) winning = 6% (h) fitness = 2% (i) achievement = 2%

6. What do you like least about your sport? (a) not playing = 23% (b) aggression = 16% (c) drills and practice = 14% (d) losing = 13% (e) injuries = 12% (f) nothing = 9% (g) equipment = 6% (h) referees = 6% (i) coaching = 2%

7. Number of hours/week that you watch television during the summer ____ $\bar{X} = 25 \pm 14$ hrs.
Median = 24 hrs., mode = 10 hrs., range = 40 hrs., min. = 10 hrs., max. = 50 hrs.

8. Time of day when you watch the most television during the summer

morning	20%
afternoon	10%
evening	70%

9. Number of hours/week that you watch television during the winter ____ = 26 ± 14 hrs.
Median = 24 hrs., mode = 10 hrs., range = 40 hrs., min. = 10 hrs., max. = 50 hrs.

10. Time of day when you watch the most television during the winter

morning	14%
afternoon	12%
evening	74%

11. (a) What type of show do you like best? Rank 1-6.
First best
1 = best
6 = least

mystery	11%	drama	5%
comedy	20%	cartoons	16%
adventure	5%	sports	39%

11. (b) What type of show do you like best? Rank 1-6.
Second best
1 = best
6 = least

mystery	13%	drama	4%
comedy	29%	cartoons	23%
adventure	12%	sports	19%

12. (a) Of these sports programs shown regularly on television, which do you watch the most? Rank 1-9.
First best
1 = best
9 = least

hockey	70%	baseball	9%
basketball	5%	golf	2%
car-racing	4%	football	5%
wrestling	3%	tennis	2%
bowling	4%		

12. (b) Of these sports programs shown regularly on television, which do you watch the most? Rank 1-9.
Second best
1 = best
9 = least

hockey	10%	baseball	8%
basketball	12%	golf	5%
car-racing	22%	football	10%
wrestling	9%	tennis	2%
bowling	2%		

13. (a) Of these sports programs shown occasionally on television, which do you watch the most? Rank 1-9.
First best
1 = best
9 = least

gymnastics	12%	soccer	11%
track and field	18%	swimming	13%
boxing	24%	skiing	9%
horse-racing	7%	synchronized	
volleyball	2%	swimming	4%

13. (b) Of these sports programs shown occasionally on television, which do you watch the most? Rank 1-9.
Second best
1 = best
9 = least

gymnastics	7%	soccer	9%
track and field	23%	swimming	20%
boxing	17%	skiing	10%
horse-racing	7%	synchronized	
volleyball	5%	swimming	3%

Hockey Results
Identification Sports/Athletics
Participation (S/A–P) and Television-Viewing (T/V)

Player Questionnaire

1. Age____
$\overline{X} = 12 \pm 5$ yrs., median = 12 yrs., mode = 10 yrs., range = 12 yrs., min. = 6 yrs., max. = 18 yrs.

2. Sex (a) male
    (b) female

3. Sport_____

4. Team name_____

5. What do you like most about your sport?
(a) rewards = 21% (b) action = 19% (c) skills
(d) game itself = 13% (e) fun and enjoyment = 12%
(f) aggression (g) winning = 5% (h) fitness = 4%
(i) achievement = 2%

6. What do you like least about your sport?
(a) aggression = 19% (b) injuries = 16%
(c) drills and practices = 16% (d) losing = 13%
(e) nothing = 13% (f) not playing = 11%
(g) equipment = 6% (h) referees = 4% (i) coaching = 2%

7. Number of hours/week that you watch television during the summer ____ $\overline{X} = 26 \pm 13$ hrs.
Median = 27 hrs., mode = 30 hrs., range = 40 hrs., min. = 10 hrs., max. = 50 hrs.

8. Time of day when you watch the most television during the summer

morning	22%
afternoon	7%
evening	71%

9. Number of hours/week that you watch television during the winter ____ $\overline{X} = 28 \pm 14$ hrs.
Median = 27 hrs., mode = 30 hrs., range = 40 hrs., min. = 10 hrs., max. = 50 hrs.

10. Time of day when you watch the most television during the winter

morning	13%
afternoon	9%
evening	78%

11. (a) What type of show do you like best? Rank 1-6.
First best
1 = best
6 = least

mystery	7%	drama	7%
comedy	17%	cartoons	17%
adventure	5%	sports	46%

11. (b) What type of show do you like best? Rank 1-6.
Second best
1 = best
6 = least

mystery	9%	drama	4%
comedy	31%	cartoons	23%
adventure	11%	sports	22%

12. (a) Of these sports programs shown regularly on television, which do you watch the most? Rank 1-9.
First best
1 = best
9 = least

hockey	83%	baseball	5%
basketball	2%	golf	1%
car-racing	3%	football	1%
wrestling	3%	tennis	1%
bowling	1%		

12. (b) Of these sports programs shown regularly on television, which do you watch the most? Rank 1-9.
Second best
1 = best
9 = least

hockey	6%	baseball	29%
basketball	11%	golf	7%
car-racing	20%	football	13%
wrestling	11%	tennis	1%
bowling	1%		

13. (a) Of these sports programs shown occasionally on television, which do you watch the most? Rank 1-9.
First best
1 = best
9 = least

gymnastics	6%	soccer	13%
track and field	18%	swimming	12%
boxing	28%	skiing	11%
horse-racing	6%	synchronized	
volleyball	3%	swimming	3%

13. (b) Of these sports programs shown occasionally on television, which do you watch the most? Rank 1-9.
Second best
1 = best
9 = least

gymnastics	7%	soccer	10%
track and field	21%	swimming	19%
boxing	18%	skiing	11%
horse-racing	8%	synchronized	
volleyball	4%	swimming	2%

Lacrosse Results
Identification Sports/Athletics
Participation (S/A–P) and Television-Viewing (T/V)

Player Questionnaire

1. Age____
$\overline{X} = 14 \pm 4$ yrs., median = 14 yrs., mode = 14 yrs., range = 15 yrs., min. = 5 yrs., max. = 20 yrs.

2. Sex (a) male
   (b) female

3. Sport_____

4. Team name_____

5. What do you like most about your sport? (a) game itself = 25% (b) aggression = 20% (c) action = 20% (d) rewards = 13% (e) fun and enjoyment = 10% (f) achievement = 5% (g) winning = 5% (h) skills = 3%

6. What do you like least about your sport?
(a) aggression = 25% (b) not playing = 17%
(c) referees = 17% (d) injuries = 11% (e) equipment = 11%
(f) nothing = 8% (g) losing = 6% (h) coaching = 3%
(i) drills and practices = 3%

7. Number of hours/week that you watch television during the summer ____ $\overline{X} = 21 \pm 14$ hrs.
Median = 14 hrs., mode = 10 hrs., range = 40 hrs., min. = 10 hrs., max. = 50 hrs.

8. Time of day when you watch the most television during the summer

morning	17%
afternoon	14%
evening	64%

9. Number of hours/week that you watch television during the winter ____ $\overline{X} = 27 \pm 15$ hrs.
Median = 24 hrs., mode = 10 hrs., range = 40 hrs., min. = 10 hrs., max. = 50 hrs.

10. Time of day when you watch the most television during the winter

morning	17%
afternoon	10%
evening	71%

11. (a) What type of show do you like best? Rank 1-6.
First best
1 = best
6 = least

mystery	17%	drama	5%
comedy	17%	cartoons	15%
adventure	5%	sports	42%

Left Column

11. (b) What type of show do you like best? Rank 1-6.
Second best
1 = best
6 = least

mystery	18%	drama	3%
comedy	38%	cartoons	13%
adventure	15%	sports	13%

12. (a) Of these sports programs shown regularly on television, which do you watch the most? Rank 1-9.
First best
1 = best
9 = least

hockey	48%	baseball	2%
basketball	7%	golf	2%
car-racing	7%	football	18%
wrestling	9%	tennis	2%
bowling	5%		

12. (b) Of these sports programs shown regularly on television, which do you watch the most? Rank 1-9.
Second best
1 = best
9 = least

hockey	18%	baseball	20%
basketball	15%	golf	%
car-racing	25%	football	8%
wrestling	10%	tennis	%
bowling	5%		

13. (a) Of these sports programs shown occasionally on television, which do you watch the most? Rank 1-9.
First best
1 = best
9 = least

gymnastics	23%	soccer	7%
track and field	14%	swimming	14%
boxing	23%	skiing	11%
horse-racing	5%	synchronized	
volleyball	%	swimming	5%

13. (b) Of these sports programs shown occasionally on television, which do you watch the most? Rank 1-9.
Second best
1 = best
9 = least

gymnastics	7%	soccer	5%
track and field	24%	swimming	12%
boxing	24%	skiing	10%
horse-racing	7%	synchronized	
volleyball	7%	swimming	2%

Baseball Results—Boys
Identification Sports/Athletics
Participation (S/A–P) and Television-Viewing (T/V)

Player Questionnaire

1. Age____
$\overline{X} = 10 \pm 2$ yrs., median = 11 yrs., mode = 8 yrs.,
range = 6 yrs., min. = 7 yrs., max. = 13 yrs.

Right Column

2. Sex (a) male
(b) female

3. Sport_____

4. Team name_____

5. What do you like most about your sport?
(a) skills = 65% (b) game itself = 21% (c) winning = 7%
(d) action = 5% (e) fun and enjoyment = 2%

6. What do you like least about your sport? (a) not playing = 58% (b) losing = 16% (c) drills and practices = 12% (d) nothing = 5% (e) injuries = 2% (f) aggression = 2% (g) referees = 2% (h) equipment = 2%

7. Number of hours/week that you watch television during the summer ____ $\overline{X} = 22 \pm 13$ hrs.
Median = 19 hrs., mode = 10 hrs., range = 40 hrs., min. = 10 hrs., max. = 50 hrs.

8. Time of day when you watch the most television during the summer

morning	15%
afternoon	18%
evening	67%

9. Number of hours/week that you watch television during the winter ____ $\overline{X} = 21 \pm 11$ hrs.
Median = 19 hrs., mode = 10 hrs., range = 40 hrs., min. = 10 hrs., max. = 50 hrs.

10. Time of day when you watch the most television during the winter

morning	15%
afternoon	26%
evening	59%

11. (a) What type of show do you like best? Rank 1-6.
First best
1 = best
6 = least

mystery	13%	drama	3%
comedy	26%	cartoons	18%
adventure	8%	sports	33%

11. (b) What type of show do you like best? Rank 1-6.
Second best
1 = best
6 = least

mystery	19%	drama	7%
comedy	10%	cartoons	32%
adventure	13%	sports	19%

12. (a) Of these sports programs shown regularly on television, which do you watch the most? Rank 1-9.
First best
1 = best
9 = least

hockey	46%	baseball	26%
basketball	10%	golf	3%
car-racing	–	football	5%
wrestling	–	tennis	3%
bowling	8%		

12. (b) Of these sports programs shown regularly on television, which do you watch the most? Rank 1-9.
Second best
1 = best
9 = least

hockey	17%	baseball	36%
basketball	11%	golf	3%
car-racing	22%	football	—
wrestling	3%	tennis	6%
bowling	3%		

13. (a) Of these sports programs shown occasionally on television, which do you watch the most? Rank 1-9.
First best
1 = best
9 = least

gymnastics	15%	soccer	10%
track and field	13%	swimming	21%
boxing	21%	skiing	3%
horse-racing	10%	synchronized	
volleyball	%	swimming	8%

13. (b) Of these sports programs shown occasionally on television, which do you watch the most? Rank 1-9.
Second best
1 = best
9 = least

gymnastics	6%	soccer	9%
track and field	27%	swimming	21%
boxing	12%	skiing	6%
horse-racing	3%	synchronized	
volleyball	9%	swimming	6%

Baseball Results—Girls
Identification Sports/Athletics
Participation (S/A–P) and Television-Viewing (T/V)

Player Questionnaire

1. Age____
$\overline{X} = 11 \pm 2$ yrs., median = 12 yrs., mode = 12 yrs., range = 6 yrs., min. = 7 yrs., max. = 13 yrs.

2. Sex (a) male
       (b) female

3. Sport_____

4. Team name_____

5. What do you like most about your sport?
(a) winning = 29% (b) game itself = 21%
(c) fun and enjoyment = 21% (d) skills = 14%
(e) action = 7% (f) rewards = 7%

6. What do you like least about your sport? (a) not playing = 46% (b) losing = 23% (c) drills and practices = 23% (d) referees = 8%

7. Number of hours/week that you watch television during the summer ____ $\overline{X} = 20 \pm 16$ hrs.
Median = 13 hrs., mode = 10 hrs., range = 40 hrs., min. = 10 hrs., max. = 50 hrs.

8. Time of day when you watch the most television during the summer

morning	25%
afternoon	17%
evening	58%

9. Number of hours/week that you watch television during the winter ____ $\overline{X} = 13 \pm 3$ hrs.
Median = 12 hrs., mode = 10 hrs., range = 20 hrs., min. = 10 hrs., max. = 30 hrs.

10. Time of day when you watch the most television during the winter

morning	17%
afternoon	—
evening	83%

11. (a) What type of show do you like best? Rank 1-6.
First best
1 = best
6 = least

mystery	25%	drama	—
comedy	33%	cartoons	33%
adventure	—	sports	8%

11. (b) What type of show do you like best? Rank 1-6.
Second best
1 = best
6 = least

mystery	27%	drama	—
comedy	36%	cartoons	27%
adventure	9%	sports	—

12. (a) Of these sports programs shown regularly on television, which do you watch the most? Rank 1-9.
First best
1 = best
9 = least

hockey	25%	baseball	33%
basketball	17%	golf	—
car-racing	8%	football	—
wrestling	—	tennis	—
bowling	17%		

12. (b) Of these sports programs shown regularly on television, which do you watch the most? Rank 1-9.
Second best
1 = best
9 = least

hockey	9%	baseball	18%
basketball	9%	golf	9%
car-racing	36%	football	9%
wrestling	—	tennis	9%
bowling	—		

13. (a) Of these sports programs shown occasionally on television, which do you watch the most? Rank 1-9.
First best
1 = best
9 = least

gymnastics	42%	soccer	—
track and field	42%	swimming	—

boxing	–	skiing	–
horse-racing	8%	synchronized	
volleyball	8%	swimming	–

13. (b) Of these sports programs shown occasionally on television, which do you watch the most? Rank 1-9. Second best
1 = best
9 = least

gymnastics	8%	soccer	8%
track and field	25%	swimming	50%
boxing	–	skiing	–
horse-racing	8%	synchronized	
volleyball	–	swimming	–

Identification of Sports/Athletics Participation and Television-Viewing

Question 1 (Q1). The age of the 259 respondents to the over-all opinionnaire ranged from five through 20 with a mean of 12 and a standard deviation of plus or minus five. The median age was 12 and the most frequently occurring age (or mode) was 11.

Q2. The respondents for this opinionnaire were drawn from the St. Clair Hockey School, Windsor Minor Lacrosse, and the Windsor Sandwich East Little League Baseball for boys and girls. The low number of females is a reflection of the paucity of girls involved in youth sports in Southwestern Ontario.

Q3. The sports involved were hockey, lacrosse, and baseball for boys and girls.

Q4. The team name was used in statistical analysis and, therefore, is not recorded here.

Q5. When the respondents were asked "What do you like most about your sport," they ranked "skill" first (22 per cent), "the game itself" second (17 per cent), "action" third (16 per cent), "reward" fourth (15 per cent), "fun and enjoyment" fifth (11 per cent), "aggression" sixth (nine per cent), "winning" seventh (six per cent), "fitness" eighth (two per cent), and "achievement" ninth (two per cent). It can be seen from the response that skill, the game itself, action, reward, and fun and enjoyment all exceed aggression, winning, fitness, and achievement. It would appear that the latter items, which are so highly valued by adults, are not at all significant to children and youth.

Q6. When the respondents were asked to indicate what they liked least about their sport "not playing" ranked first (23 per cent), "aggression" ranked second (16 per cent), "drills and practice" ranked third (14 per cent), "losing" ranked fourth (13 per cent), "injuries" ranked fifth (12 per cent), "nothing" ranked sixth (9 per cent), "equipment" ranked seventh (six per cent), "referees" ranked eighth (six per cent), and "coaching" ranked ninth (two per cent). Again we see that the items that most adults criticize in youth sports rank far behind the concerns of the players, which are "not playing" and "excessive aggression".

Q7. When asked the number of hours per week that the respondents watched television during the summer, the average was 25 with a standard deviation of 14 hours. There was quite a bit of diversity, as the minimum was ten hours and the maximum 50.

Q8. For the most part, the children and youth watched television in the evening (70 per cent), in the morning second (20 per cent), and in the afternoon last (ten per cent).

Q9. In terms of television-viewing habits during the winter, the average number of hours was approximately the same (26 hours) as during the summer.

Q10. In terms of the time of the day, winter viewing habits ranked the same as in the summer; however, "evening" absorbed even a higher percentage of viewing time (74 per cent).

Q11(a) and 11(b). The respondents were asked to rank the types of shows that they liked first best and second best. As can be seen, sports programs ranked first (39 per cent), followed distantly by comedy (20 per cent) and cartoons (16 per cent). In terms of their second priority, comedy ranked first (29 per cent), followed by cartoons (23 per cent), but sports still absorbed a high percentage of their time (19 per cent). In both rankings drama, adventure and mystery ranked low.

Q12(a) and 12(b). The respondents were asked to list their first priority and second priority on sports programs shown regularly on television. As can be seen, the overwhelming percentage ranked hockey first (70 per cent), with baseball quite a distant second (nine per cent). It could be argued that the majority of the respondents were involved in hockey and, therefore, biased towards this activity. Analysis of the sub-group charts, however, will show that lacrosse participants also ranked hockey number one (48 per cent) as did boys involved in baseball (46 per cent). Girls' baseball respondents ranked baseball first (33 per cent), but even here hockey was a close second (25 per cent). When it comes to the number-one choice, nothing approaches hockey, even in comparison to the other major spectator sports: baseball (nine per cent), football (five per cent), and basketball (five per cent) found themselves in the range of bowling and car-racing (four per cent), wrestling (three per cent), and golf and tennis (two per cent).

In terms of a second choice, car-racing ranked first (22 per cent) followed by basketball (12 per cent), hockey and football (ten per cent), wrestling (nine per cent), baseball (eight per cent), golf (five per cent), and bowling and tennis (two per cent).

It should be pointed out that some of the opinion-naires were distributed and retrieved during the Olympic games and responses were undoubtedly influenced by this fact (see Q. 13).

Q13(a) and 13(b). The respondents were asked to rank the sports programs shown occasionally on television. The first-choice ranking showed boxing first (24 per cent), followed closely by track and field (18 per cent), swimming (13 per cent), gymnastics (12 per cent), soccer

(11 per cent), skiing (nine per cent), horse-racing (seven per cent), and synchronized swimming (four per cent).

In terms of a second choice among sports programs shown occasionally, track and field, swimming, and boxing still ranked first, second, and third (23 per cent, 20 percent, and 17 per cent, respectively) followed by skiing (ten per cent), soccer (nine per cent), horse-racing and gymnastics (seven per cent), volleyball (five per cent), and synchronized swimming (three per cent).

Later in this report, a number of these programs are coded on a semantic-differential basis from the least aggressive to the most aggressive and violent, and are cross-tabulated with the sports activities on the basis of least aggressive to most aggressive (baseball, lacrosse, and hockey), providing an opportunity to identify significant associations.

Project – Competition Concern

The over-all response on the professional athletics – amateur sports forced-choice opinionnaire favoured amateur sport. The results for seven of the 13 response categories were as follows: an *ultimate goal* of participation and play (63 per cent); an emphasis on playing everyone equally in terms of player selection (69 per cent); rule application which favoured adherence to the spirit of the rules and sportsmanship (75 per cent); evaluation of league success on the basis of player improvement and numbers participating (68 per cent); decision-making at the local level (59 per cent) with coordinated natural evolution in terms of the growth rate of children (68 per cent); the attitude that "it doesn't matter if you win or lose, but how you play the game" (73 per cent).

The six remaining items showed a preference for professional athletics identification terms such as a *long-range aim* focusing on the specialization of the child's skill development (57 per cent); the *objective* of work to win and aggression (55 per cent) *rewards* for achievement in the form of banquets and trophies (63 per cent) *commitment of time* for practices and games in excess of six hours (52 per cent); *scheduling emphasis* focusing on regional and provincial competition (51 per cent); and the over-all *philosophy* that a game worth playing is worth playing well 61 per cent).

The dominance of amateur sports responses over professional athletics responses far exceeds the absolute simple majority of seven to six. Analysis of the percentage of difference in agreement shows that in those instances where professional athletics responses were selected the sum of per cent of difference in agreement was 78 per cent, as contrasted with the amateur sports responses where the sum of per cent of difference was 247 per cent.

Television-Viewing Diary – Habits and Feelings

The third section of the opinionnaire records the over-all clustered results of the listing of a sample of television programs which were checked off by the respondents, and then rated by the respondents on the frequency with which they watched these programs, their motivation for viewing them, their feelings following each program, as well as parental attitudes and behaviour in response to the child's or youth's watching the program. The data for this particular section was collected by a stratified random sample which assured that all subjects were provided with television schedules for all days of the week and all periods of the day. The respondents checked off the programs that they watched and then recorded each program and responded to each question in terms of that program. In a modified form, this provided a diary by which the respondents could indicate which programs they had watched the previous day.

The various programs listed were subsequently ranked by a panel of experts (children in the age range of the subjects) on a semantic scale running from very non-aggressive, to non-aggressive, to neutral, to aggressive, to very aggressive.

It will be noted that at the bottom of each television diary and behaviour table, the reader will find specific statistics resulting from a clustering of the subjects' responses. The mean number of hours recorded was six per day with a standard deviation of plus or minus four. The median and mode were five and four hours respectively, with rather a large running from zero hours to 24 hours.

In terms of the over-all response, it is interesting to note that although 50 per cent of the programs fell into the very non-aggressive (19 per cent) or non-aggressive range (31 per cent), there was a total of 23 per cent that fell into the aggressive range and ten per cent that fell into the very aggressive range. Regarding the very aggressive program, the respondents indicated that the majority "always watched the program" (51 per cent), and that they watched it because it was "funny and had action" (37 per cent each) and further "felt happy" ☺ (68 per cent) after the program. It is also very revealing that 63 per cent of their parents "liked it" and that 54 per cent "watched the program" with them.

When we contrast the reactions to the very aggressive program with those towards the very non-aggressive, we find that the subjects only watched non-aggressive program "sometimes" (65 percent greater than 35 per cent) and that they found them "funny" (48 per cent) and "interesting" (22 per cent). Although 61 per cent felt happy afterwards ☺ , eight per cent felt sad ☹ (contrasted with only two per cent of those who watch very aggressive shows). In terms of *very non-aggressive* shows (61 per cent) of the parents "liked it" and similarly (54 per cent) "watched the show" with their children.

The remainder of the sub-group summaries (hockey, lacrosse, and baseball for boys and girls) can be read in a similar manner. Comparison of the identification data in terms of viewing habits and liking; preference on the professional athletics – amateur sports dichotomy; and of the television-viewing diet in terms of habit, motiva-

Project: Competition Concern

What Do We Do Now?

The person being interviewed is an ☐ executive, ☐ coach, ☐ official (referee et cetera,) ☐ parent, ☐ sponsor, ☐ player.

Please indicate your preference by checking (✓) one (1) choice only from either Column A or Column B for each of the items. The choices are based on interviews with executives, coaches, officials, and parents.

		Column A			Column B	
1.	ultimate goal	38.5% ☐	win and/or excel	61.5% ☐	participate and play	
2.	aim (long-range)	43.0% ☐	generalization — child's over-all development	57% ☐	specialization – child's skills development	
3.	objective (immediate)	55% ☐	work to win and aggression	45% ☐	partake for fun and relaxation	
4.	rewards	37% ☐	Playing is its own reward, no banquets and trophies	63% ☐	Achievement should be rewarded by banquets and trophies	
5.	commitment of time (practice and games per week)	48% ☐	5 hours or less	52% ☐	6 hours or more	
6.	emphasis in player selection	31% ☐	play the best most often	69% ☐	play everyone equally	
7.	rules-application	25% ☐	letter of law (gamesmanship)	75% ☐	spirit of rules (sportsmanship)	
8.	scheduling emphasis	49% ☐	local and league competition	51% ☐	regional and state/provincial competition	
9.	evaluation of league success	32% ☐	by standings and competitors' calibre	68% ☐	on player improvement and numbers participating	
10.	decision-making level	41% ☐	state/provincial or national	59% ☐	local league	
11.	growth rate of child	32% ☐	control and rapid development	68% ☐	coordination and natural evolution	
12.	clichés	73% ☐	It doesn't matter if you win or lose, but how you play the game	27% ☐	No excuse is adequate for losing. No cost is too high for winning	
13.	philosophy	61% ☐	A game worth playing is worth playing well	39% ☐	Any game worth playing is worth playing even if poorly	

Additional Comments: (Please use other side if necessary.)

Professional Athletics (PA)   Amateur Sports (AS)

Q1 ....Amateur Sports (AS) = +23%
Q2 .... Professional Athletics(PA) = +14%
Q3 ....(PA) = +10%
Q4 ....(PA) = +26%
Q5 ....(PA) = + 4%
Q6 ....(AS) = +38%
Q7 ....(AS) = +50%
Q8 ....(PA) = + 2%
Q9 ....(AS) = +36%
Q10 ....(AS) = +18%
Q11 ....(AS) = +36%
Q12 ....(AS) = +46%
Q13 ....(PA) = +22%

PA = 6 / +78%   <   AS = 7 / +247%   PA 6 < 7 AS = +169% AS

Hockey

Project: Competition Concern

What Do We Do Now?

The person being interviewed is an ☐ executive, ☐ coach,
☐ official (referee et cetera,) ☐ parent, ☐ sponsor, ☐ player.

Please indicate your preference by checking (✓) one (1) choice only from either Column A or Column B for each of the items. The choices are based on interviews with executives, coaches, officials, and parents.

			Column A			Column B
1.	ultimate goal	38% ☐	win and/or excel	62% ☐		participate and play
2.	aim (long-range)	45% ☐	generalization — child's over-all development	55% ☐		specialization – child's skills development
3.	objective (immediate)	64% ☐	work to win and aggression	36% ☐		partake for fun and relaxation
4.	rewards	38% ☐	Playing is its own reward, no banquets and trophies	62% ☐		Achievement should be rewarded by banquets and trophies
5.	commitment of time (practice and games per week)	40% ☐	5 hours or less	60% ☐		6 hours or more
6.	emphasis in player selection	31% ☐	play the best most often	69% ☐		play everyone equally
7.	rules-application	24% ☐	letter of law (gamesmanship)	76% ☐		spirit of rules (sportsmanship)
8.	scheduling emphasis	45% ☐	local and league competition	55% ☐		regional and state/provincial competition
9.	evaluation of league success	35% ☐	by standings and competitors' calibre	65% ☐		on player improvement and numbers participating
10.	decision-making level	47% ☐	state/provincial or national	53% ☐		local league
11.	growth rate of child	34% ☐	control and rapid development	66% ☐		coordination and natural evolution
12.	clichés	78% ☐	It doesn't matter if you win or lose, but how you play the game	22% ☐		No excuse is adequate for losing. No cost is too high for winning
13.	philosophy	65% ☐	A game worth playing is worth playing well	35% ☐		Any game worth playing is worth playing even if poorly

Additional Comments: (Please use other side if necessary.)

Professional Athletics (PA)   Amateur Sports (AS)

Q1 ....Amateur Sports (AS) = +24%
Q2 .... Professional Athletics(PA) = +10%
Q3 ....(PA) = +28%
Q4 ....(PA) = +26%
Q5 ....(PA) = +20%
Q6 ....(AS) = +38%
Q7 ....(AS) = +52%
Q8 ....(PA) = +10%
Q9 ....(AS) = +20%
Q10 ....(AS) = + 6%
Q11 ....(AS) = +32%
Q12 ....(AS) = +56%
Q13 ....(PA) = +31%

PA = 6 / +125%   <   AS = 7 / +228%   PA 6 < 7 AS = +103% AS

Lacrosse

Project: Competition Concern

What Do We Do Now?

The person being interviewed is an ☐ executive, ☐ coach,
☐ official (referee et cetera,) ☐ parent, ☐ sponsor, ☐ player.

Please indicate your preference by checking (✓) one (1) choice only from either Column A or Column B for each of the items. The choices are based on interviews with executives, coaches, officials, and parents.

			Column A			Column B
1.	ultimate goal	40% ☐	win and/or excel	58% ☐		participate and play
2.	aim (long-range)	34% ☐	generalization — child's over-all development	66% ☐		specialization – child's skills development
3.	objective (immediate)	56% ☐	work to win and aggression	44% ☐		partake for fun and relaxation
4.	rewards	43% ☐	Playing is its own reward, no banquets and trophies	57% ☐		Achievement should be rewarded by banquets and trophies
5.	commitment of time (practice and games per week)	67% ☐	5 hours or less	33% ☐		6 hours or more
6.	emphasis in player selection	27% ☐	play the best most often	73% ☐		play everyone equally
7.	rules-application	39% ☐	letter of law (gamesmanship)	61% ☐		spirit of rules (sportsmanship)
8.	scheduling emphasis	50% ☐	local and league competition	50% ☐		regional and state/provincial competition
9.	evaluation of league success	36% ☐	by standings and competitors' calibre	64% ☐		on player improvement and numbers participating
10.	decision-making level	44% ☐	state/provincial or national	56% ☐		local league
11.	growth rate of child	33% ☐	control and rapid development	67% ☐		coordination and natural evolution
12.	clichés	66% ☐	It doesn't matter if you win or lose, but how you play the game	34% ☐		No excuse is adequate for losing. No cost is too high for winning .
13.	philosophy	59% ☐	A game worth playing is worth playing well	41% ☐		Any game worth playing is worth playing even if poorly

Additional Comments: (Please use other side if necessary.)

Professional Athletics (PA)   Amateur Sports (AS)

Q1 ....Amateur Sports (AS) = +18%
Q2 .... Professional Athletics(PA) = +32%
Q3 ....(PA) = +12%
Q4 ....(PA) = +14%
Q5 ....(AS) = +34%
Q6 ....(AS) = +46%
Q7 ....(AS) = +22%
Q8 ....(PA) = ___ ....(AS) = ___
Q9 ....(AS) = +28%
Q10..(AS) = +12%
Q11..(AS) = +34%
Q12..(AS) = +32%
Q13 ....(PA) = +21%

PA = 4 / +79%   <   AS = 7 / +226%   PA 4 < 7 AS = +147% AS

Boys' Baseball

Project: Competition Concern

What Do We Do Now?

The person being interviewed is an ☐ executive, ☐ coach, ☐ official (referee et cetera,) ☐ parent, ☐ sponsor, ☐ player.

Please indicate your preference by checking (✓) one (1) choice only from either Column A or Column B for each of the items. The choices are based on interviews with executives, coaches, officials, and parents.

			Column A		Column B
1.	ultimate goal	28% ☐	win and/or excel	62% ☐	participate and play
2.	aim (long-range)	45% ☐	generalization — child's over-all development	55% ☐	specialization – child's skills development
3.	objective (immediate)	37% ☐	work to win and aggression	63% ☐	partake for fun and relaxation
4.	rewards	35% ☐	Playing is its own reward, no banquets and trophies	65% ☐	Achievement should be rewarded by banquets and trophies
5.	commitment of time (practice and games per week)	59% ☐	5 hours or less	41% ☐	6 hours or more
6.	emphasis in player selection	36% ☐	play the best most often	64% ☐	play everyone equally
7.	rules-application	21% ☐	letter of law (gamesmanship)	79% ☐	spirit of rules (sportsmanship)
8.	scheduling emphasis	50% ☐	local and league competition	50% ☐	regional and state/provincial competition
9.	evaluation of league success	25% ☐	by standings and competitors' calibre	75% ☐	on player improvement and numbers participating
10.	decision-making level	23% ☐	state/provincial or national	77% ☐	local league
11.	growth rate of child	23% ☐	control and rapid development	77% ☐	coordination and natural evolution
12.	clichés	59% ☐	It doesn't matter if you win or lose, but how you play the game	41% ☐	No excuse is adequate for losing. No cost is too high for winning
13.	philosophy	45% ☐	A game worth playing is worth playing well	55% ☐	Any game worth playing is worth playing even if poorly

Additional Comments: (Please use other side if necessary.)

Professional Athletics (PA)   Amateur Sports (AS)

Q1 ....Amateur Sports (AS) = +24%
Q2 .... Professional Athletics(PA) = +10%
Q3 ....(AS) = +26%
Q4 ....(PA) = +30%
Q5 ....(AS) = +18%
Q6 ....(AS) = +28%
Q7 ....(AS) = +58%
Q8 ....(PA) = — ....(AS) = —
Q9 ....(AS) = +50%
Q10...(AS) = +54%
Q11...(AS) = +54%
Q12...(AS) = +18%
Q13...(AS) = +10%

PA = 2 / +40%   <   AS = 10 / +340%   PA 2 < 10 AS = +300% AS

Girls' Baseball

Project: Competition Concern

What Do We Do Now?

The person being interviewed is an ☐ executive, ☐ coach, ☐ official (referee et cetera,) ☐ parent, ☐ sponsor, ☐ player.

Please indicate your preference by checking (✓) one (1) choice only from either Column A or Column B for each of the items. The choices are based on interviews with executives, coaches, officials, and parents.

			Column A		Column B
1.	ultimate goal	7% ☐	win and/or excel	93% ☐	participate and play
2.	aim (long-range)	38.5% ☐	generalization — child's over-all development	61.5% ☐	specialization – child's skills development
3.	objective (immediate)	7% ☐	work to win and aggression	93% ☐	partake for fun and relaxation
4.	rewards	7% ☐	Playing is its own reward, no banquets and trophies	93% ☐	Achievement should be rewarded by banquets and trophies
5.	commitment of time (practice and games per week)	36% ☐	5 hours or less	64% ☐	6 hours or more
6.	emphasis in player selection	21% ☐	play the best most often	79% ☐	play everyone equally
7.	rules-application	8% ☐	letter of law (gamesmanship)	92% ☐	spirit of rules (sportsmanship)
8.	scheduling emphasis	85% ☐	local and league competition	15% ☐	regional and state/provincial competition
9.	evaluation of league success	9% ☐	by standings and competitors' calibre	91% ☐	on player improvement and numbers participating
10.	decision-making level	15% ☐	state/provincial or national	85% ☐	local league
11.	growth rate of child	31% ☐	control and rapid development	69% ☐	coordination and natural evolution
12.	clichés	85% ☐	It doesn't matter if you win or lose, but how you play the game	15% ☐	No excuse is adequate for losing. No cost is too high for winning
13.	philosophy	58% ☐	A game worth playing is worth playing well	42% ☐	Any game worth playing is worth playing even if poorly

Additional Comments: (Please use other side if necessary.)

Professional Athletics (PA)	Amateur Sports (AS)
	Amateur Sports (AS) = +86%
Q1	
Q2 .... Professional Athletics(PA) = +23%	
Q3	(AS) = +86%
Q4 ....(PA) = +86%	
Q5 ....(PA) = +28%	
Q6	(AS) = +58%
Q7	(AS) = +84%
Q8	(AS) = +70%
Q9	(AS) = +82%
Q10	(AS) = +70%
Q11	(AS) = +38%
Q12 ....(PA) = +16%	(AS) = +70%
Q13	

PA = 4 / +153%   <   AS = 9 / +644%   PA 4 < 9 AS = +491% AS

Over-all Results—*Television-Viewing Diary Child/Youth and Parent Habits and Feelings*

Program	I watch this show ...		I watch this show because ...		When this comes on, my parents ...		After watching this show I feel ...		
Very non-aggressive 19%	(a) always.	35%	(a) it's funny.	48%	(a) like it.	61%			
	(b) sometimes.	65%	(b) of the action.	15%	(b) don't like it.	76%	😊	😐	🙁
			(c) of the mystery.	8%	(c) don't care.	23%			
			(d) it's interesting.	22%	———				
			(e) of the acting.	6%	(a) watch it.	54%			
					(b) don't watch it.	46%	61%	31%	8%
Non-aggressive 31%	(a) always.	38%	(a) it's funny.	62%	(a) like it.	65%			
	(b) sometimes.	62%	(b) of the action.	16%	(b) don't like it.	16%	😊	😐	🙁
			(c) of the mystery.	4%	(c) don't care.	25%			
			(d) it's interesting.	14%	———				
			(e) of the acting.	4%	(a) watch it.	62%			
					(b) don't watch it.	38%	67%	27%	6%
Neutral 16%	(a) always.	36%	(a) it's funny.	44%	(a) like it.	56%			
	(b) sometimes.	64%	(b) of the action.	17%	(b) don't like it.	10%	😊	😐	🙁
			(c) of the mystery.	10%	(c) don't care.	34%			
			(d) it's interesting.	23%	———				
			(e) of the acting.	6%	(a) watch it.	60%			
					(b) don't watch it.	40%	60%	28%	12%
Aggressive 23%	(a) always.	40%	(a) it's funny.	53%	(a) like it.	58%			
	(b) sometimes.	60%	(b) of the action.	23%	(b) don't like it.	12%	😊	😐	🙁
			(c) of the mystery.	8%	(c) don't care.	30%			
			(d) it's interesting.	12%	———				
			(e) of the acting.	4%	(a) watch it.	55%			
					(b) don't watch it.	45%	65%	28%	6%
Very aggressive 10%	(a) always.	51%	(a) it's funny.	37%	(a) like it.	63%			
	(b) sometimes.	49%	(b) of the action.	37%	(b) don't like it.	9%	😊	😐	🙁
			(c) of the mystery.	13%	(c) don't care.	28%			
			(d) it's interesting.	17%	———				
			(e) of the acting.	2%	(a) watch it.	54%			
					(b) don't watch it.	46%	68%	30%	2%

Hours
Mean   =   6 hours, Median = 5 hours, Mode = 4 hours
Range = 42 hours, Min.   = 0 hours, Max.   = 4 hours
Standard deviation = 4 hours

TV 001
Very non-aggressive = 18%
Non-aggressive   = 34%
Neutral   = 16%
Aggressive   = 25%
Very aggressive   = 8%

tion, and feelings of both the players and parents led the researchers to the conclusion that they were dealing with two rather distinct populations: namely, those involved in hockey and lacrosse and those involved in baseball (both boys and girls). Further, the predisposition both to participate in and to view aggressive athletics (1), with a preference for a high level of competition in the professional athletic model (2), with a very high correlation between the aggressiveness and violence associated with the sport selected (3), and their propensity to view aggressive or very aggressive television (4), might lead one to believe that those involved in hockey and lacrosse are aggressive not because of their involvement in hockey or lacrosse or because of their viewing of aggressive or very aggressive television, but rather because they are by nature aggressors.

Cross-Tabulation of Written Opinionnaire

In order to determine the association between the various sports, running from the least aggressive to the most aggressive (baseball, lacrosse, and hockey), in terms of the rules of the game and the reality of the activity and the various items on the written opinionnaire, cross-tabulation was conducted, with the various items that had been listed or identified rearranged to provide a semantic differential. For example, on question 5, the nine motivating forces that were identified by the subjects have been rearranged so that 1 equals fun and enjoyment, 2 equals the game itself, 3 equals action, 4 equals fitness, 5 equals skills, 6 equals achievement, 7 equals aggression, 8 equals winning, and 9 equals rewards. The sports, on the other hand, have been arranged so that baseball equals 1/least aggression; lacrosse equals 2/medium aggression; and hockey equals 3/most aggression. In view of the low N (number) for girl's baseball, this sample was not considered in the cross-tabulation, although it is recorded at the bottom of the chart. Significance levels for chi-square tests of association have been recorded in the charts that follow, and the Kendall Tau B (a non-parametric correlation) has also been indicated (see below each cross-tabulation for the p and r).

In response to Q5 ("What do you like most about your sport?"), we can see from the cross-tabulation variable 4 versus variable 9 – sport versus most that there is a significant X^2 association and that this relationship is positive: that is, the more aggressive the sport, the more the children/youth involved value pro-athletics-oriented values such as aggression, winning, and rewards, as opposed to amateur sports values.

Similarly, the respondents to Q6 ("What do you like least about your sport?") showed a high correlation and significant association between their sport and the things that they "liked least" about their sport. For example, those involved in the most aggressive sports like lacrosse and hockey ranked such items as injury, losing, and aggression very high among their concerns,

while those involved in baseball ranked these items relatively low (perhaps due to the fact that the chance of injury and aggression is much lower here). The baseball players were most concerned about not playing (58 per cent) and, indeed, it might be pointed out that all children and youth were relatively concerned about this item.

While the particular cross-tabulation for Q7 ("Number of hours/week that you watched television during the summer?"), did not reach the significant level identified ($p < .12$), it is worthy of recording since the Kendall Tau B of $+.10$ shows a constant trend wherein the less-aggressive the sport, the lower the summer television hours, that is, baseball players were very low or low in their television-viewing habits, while those involved in lacrosse and hockey were relatively high in their television-viewing.

Q9 ("Number of hours that you watch television during the winter") showed a similar trend and was significant ($p < .02$).

Although no significant difference or association was identified on Q11.1 and 11.2 (" What type of show did you like best? – first choice and second choice), it should be pointed out that sports television programs ranked highest on first choice and second choice (hockey – 46 per cent/22 per cent; lacrosse 42 per cent/13 per cent; and baseball 33 per cent/19 per cent). Comedy and cartoons, in general, ranked second and third, while mystery, adventure, and drama are, as one respondent indicated, "the pits".[5] It is interesting to note that the girls involved in baseball had a far different perspective, ranking sport very low (eight per cent/0 per cent) with comedy, mystery, and cartoons highest (33 per cent/36 per cent; 33 per cent, 25 per cent/27 per cent respectively).

In Q 12.1 and 12.2 ("Of the sports programs shown regularly on television, which do you watch most (first choice and second choice)?"), there is a significant relationship found between sports participation and first-choice sport programs (probability less than .00 and $r = +.19$). There is a strong tendency for those involved in the most aggressive and violent sports activities to prefer the most aggressive and violent television programs. Again, note the discrepancy between the television-viewing preferences of girls involved in baseball, and those of the boys involved in hockey and lacrosse. We find that the girls' first choice was baseball (33 per cent compared with five per cent and two per cent for those involved in hockey and lacrosse) and their second choices were bowling and basketball (17 per cent, which is greater than the one per cent and two per cent for hockey participants and the five per cent and seven per cent for lacrosse participants). On the other hand, the viewing habits of boys involved in little league baseball show some resemblance to those of the girls (baseball – 26 per cent; basketball – ten per cent and bowling – eight per cent).

Hockey Results—Television-Viewing Diary Child/Youth and Parent Habits and Feelings

Program	I watch this show . . .		I watch this show because . . .		When this comes on, my parents . . .		After watching this show I feel . . .
Very non aggressive 14%	(a) always. (b) sometimes.	33% 67%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	47% 17% 25% 23% 8%	(a) like it. (b) don't like it. (c) don't care. —— (a) watch it. (b) don't watch it.	59% 12% 29% 55% 45%	☺ ☺ ☹ 60% 36% 4%
Non-aggressive 33%	(a) always. (b) sometimes.	36% 64%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	61% 21% 2% 12% 4%	(a) like it. (b) don't like it. (c) don't care. —— (a) watch it. (b) don't watch it.	67% 7% 26% 57% 43%	☺ ☺ ☹ 70% 27% 3%
Neutral 10%	(a) always. (b) sometimes.	40% 60%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	66% 13% 7% 13% 1%	(a) like it. (b) don't like it. (c) don't care. —— (a) watch it. (b) don't watch it.	54% 10% 36% 63% 37%	☺ ☺ ☹ 69% 27% 4%
Aggressive 31%	(a) always. (b) sometimes.	38% 62%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	54% 23% 6% 13% 4%	(a) like it. (b) don't like it. (c) don't care. —— (a) watch it. (b) don't watch it.	60% 11% 29% 51% 49%	☺ ☺ ☹ 67% 29% 4%
Very aggressive 12%	(a) always. (b) sometimes.	46% 54%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting,	34% 37% 15% 12% 3%	(a) like it. (b) don't like it. (c) don't care. —— (a) watch it. (b) don't watch it.	60% 8% 32% 54% 46%	☺ ☺ ☹ 64% 33% 3%

Hours
Mean = 5 ± 4 hours, Median = 4 hours, Mode = 3 hours
Range = 42 hours, Min. = 0 hours, Max. = 42 hours

TV 001
Very non-aggressive = 10%
Non-aggressive   = 38%
Neutral   = 9%
Aggressive   = 36%
Very aggressive   = 6%

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Lacrosse Results—Television-Viewing Diary Child/Youth and Parent Habits and Feelings

Program	I watch this show ...		I watch this show because ...		When this comes on, my parents ...		After watching this show I feel ... (😊 / 😐 / ☹)
Very non aggressive 13%	(a) always. (b) sometimes.	34% 66%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	30% 19% 15% 36% 0%	(a) like it. (b) don't like it. (c) don't care. ___ (a) watch it. (b) don't watch it.	60% 13% 27% — 45% 55%	43% 43% 14%
Non-aggressive 32%	(a) always. (b) sometimes.	31% 69%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	66% 6% 8% 19% 1%	(a) like it. (b) don't like it. (c) don't care. ___ (a) watch it. (b) don't watch it.	59% 9% 32% — 68% 32%	64% 19% 17%
Neutral 35%	(a) always. (b) sometimes.	31% 69%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	36% 13% 11% 30% 10%	(a) like it. (b) don't like it. (c) don't care. ___ (a) watch it. (b) don't watch it.	51% 6% 43% — 53% 47%	42% 28% 30%
Aggressive 11%	(a) always. (b) sometimes.	46% 54%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	48% 13% 23% 6% 10%	(a) like it. (b) don't like it. (c) don't care. ___ (a) watch it. (b) don't watch it.	52% 4% 44% — 67% 33%	45% 26% 29%
Very aggressive 9%	(a) always. (b) sometimes.	63% 37%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	40% 36% 8% 16% 0%	(a) like it. (b) don't like it. (c) don't care. ___ (a) watch it. (b) don't watch it.	75% 4% 21% — 57% 43%	63% 37% 0%

Hours
Mean = 5 ± 4 hours, Median = 4 hours, Mode = 0 hours
Range = 12 hours, Min. = 0 hours, Max. = 12 hours

TV 001
Very non-aggressive	= 16%
Non-aggressive	= 37%
Neutral	= 34%
Aggressive	= 5%
Very aggressive	= 8%

Boys' Baseball Results—Television-Viewing Diary Child/Youth and Parent Habits and Feelings

Program	I watch this show . . .		I watch this show because . . .		When this comes on, my parents . . .		After watching this show I feel . . .
Very non aggressive 31%	(a) always.	32%	(a) it's funny.	53%	(a) like it.	66%	😊 😐 ☹
	(b) sometimes.	68%	(b) of the action.	15%	(b) don't like it.	1%	70% 17% 13%
			(c) of the mystery.	8%	(c) don't care.	17%	
			(d) it's interesting.	16%	———		
			(e) of the acting.	8%	(a) watch it.	58%	
					(b) don't watch it.	42%	
Non-aggressive 25%	(a) always.	51%	(a) it's funny.	63%	(a) like it.	69%	😊 😐 ☹
	(b) sometimes.	49%	(b) of the action.	15%	(b) don't like it.	18%	63% 30% 7%
			(c) of the mystery.	5%	(c) don't care.	13%	
			(d) it's interesting.	14%	———		
			(e) of the acting.	3%	(a) watch it.	68%	
					(b) don't watch it.	32%	
Neutral 20%	(a) always.	40%	(a) it's funny.	27%	(a) like it.	61%	😊 😐 ☹
	(b) sometimes.	60%	(b) of the action.	26%	(b) don't like it.	16%	68% 28% 4%
			(c) of the mystery.	12%	(c) don't care.	23%	
			(d) it's interesting.	24%	———		
			(e) of the acting.	11%	(a) watch it.	62%	
					(b) don't watch it.	38%	
Aggressive 14%	(a) always.	42%	(a) it's funny.	54%	(a) like it.	50%	😊 😐 ☹
	(b) sometimes.	58%	(b) of the action.	26%	(b) don't like it.	24%	66% 30% 4%
			(c) of the mystery.	8%	(c) don't care.	26%	
			(d) it's interesting.	10%	———		
			(e) of the acting.	2%	(a) watch it.	56%	
					(b) don't watch it.	44%	
Very aggressive 10%	(a) always.	49%	(a) it's funny.	39%	(a) like it.	68%	😊 😐 ☹
	(b) sometimes.	51%	(b) of the action.	43%	(b) don't like it.	15%	81% 15% 4%
			(c) of the mystery.	9%	(c) don't care.	17%	
			(d) it's interesting.	9%	———		
			(e) of the acting.	0%	(a) watch it.	50%	
					(b) don't watch it.	50%	

Hours
Mean = 7 ± 4 hours, Median = 7 hours, Mode = 6 hours
Range = 14 hours, Min. = 0 hours, Max. = 14 hours

TV 001
Very non-aggressive = 37%
Non-aggressive = 18%
Neutral = 26%
Aggressive = 5%
Very aggressive = 13%

Girls' Baseball Results—Television-Viewing Diary Child/Youth and Parent Habits and Feelings

Program	I watch this show . . .		I watch this show because . . .		When this comes on, my parents . . .		After watching this show I feel . . .
Very non aggressive 33%	(a) always. (b) sometimes.	44% 56%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	53% 6% 13% 26% 2%	(a) like it. (b) don't like it. (c) don't care. ____ (a) watch it. (b) don't watch it.	55% 14% 31% 51% 49%	😊 😐 ☹ 55% 43% 2%
Non-aggressive 28%	(a) always. (b) sometimes.	42% 58%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	56% 9% 16% 16% 2%	(a) like it. (b) don't like it. (c) don't care. ____ (a) watch it. (b) don't watch it.	56% 16% 28% 68% 32%	😊 😐 ☹ 63% 34% 3%
Neutral 13%	(a) always. (b) sometimes.	37% 63%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	32% 32% 4% 32% 0%	(a) like it. (b) don't like it. (c) don't care. ____ (a) watch it. (b) don't watch it.	68% 0% 32% 67% 33%	😊 😐 ☹ 66% 34% 0%
Aggressive 15%	(a) always. (b) sometimes.	62% 38%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	38% 29% 19% 14% 0%	(a) like it. (b) don't like it. (c) don't care. ____ (a) watch it. (b) don't watch it.	70% 5% 25% 73% 27%	😊 😐 ☹ 66% 34% 0%
Very aggressive 11%	(a) always. (b) sometimes.	75% 25%	(a) it's funny. (b) of the action. (c) of the mystery. (d) it's interesting. (e) of the acting.	50% 31% 13% 6% 0%	(a) like it. (b) don't like it. (c) don't care. ____ (a) watch it. (b) don't watch it.	50% 6% 44% 58% 42%	😊 😐 ☹ 71% 29% 0%

Hours
Mean = 8 ± 5 hours, Median = 9 hours, Mode = 9 hours
Range = 13 hours, Min. = 2 hours, Max. = 15 hours

TV 001
Very non-aggressive = 43%
Non-aggressive   = 21%
Neutral   = 14%
Aggressive   = 14%
Very aggressive   = 7%

In terms of Q13.1 and 13.2 ("Of the sports programs shown occasionally on television, which do you watch most – first and second choice?"), first choice again showed a significant association (p<.007) and a positive correlation so that again we find that those children and youth involved in the most aggressive and violent sports activity, also view the most aggressive and violent television programs in this category. For example, hockey and lacrosse players ranked boxing first (28 per cent and 23 per cent respectively); whereas, boys involved in little league baseball ranked this activity much lower (21 per cent). Girls involved in little league baseball ranked gymnastics and track and field first (42 per cent each) and did not list boxing among their choices.

Project: Competition Concern

The cross-tabulation results of sports participation with the professional athletics-amateur sports forced-choice opinionnaire are summarized on the chart that follows. Perusal of this chart shows that in those instances where there is a difference in attitude (mainly questions 3, 5, 12, and 13), it appears that baseball players are oriented primarily to the true amateur/school sports model, while lacrosse and hockey players identify strongly with the professional athletics model. On question 3, when questioned on *objectives*, 63 per cent of the boys playing baseball (93 per cent of the girls) indicated that they partake for "fun". Fifty-six per cent of lacrosse players said that they participated in order to "work to win and to be aggressive". On question 5, time commitment, hockey players were much more inclined to practice six or more hours per week (60 per cent) than were baseball or lacrosse players (41 per cent and 33 per cent respectively). On question 13, in terms of philosophy, 55 per cent of the baseball players indicated "any game worth playing is worth playing even if poorly", whereas 65 per cent of the hockey players and 58 per cent of the lacrosse players felt "that a game worth playing is worth playing well". On question 10, decision-making, those involved in baseball (77 per cent) favoured "local league control"; whereas those involved in lacrosse and hockey were more oriented to "state/provincial or national control". In general, it can be said that boys and girls involved in baseball favoured the *amateur sports model*, while the boys involved in lacrosse and hockey favoured the *professional athletics model*.

Cross-Tabulations

1. V4 versus V9

Question 5 = What do you like most about your sport?

Sport versus Most

Sport	Fun and enjoy-ment	Game itself	Action	Fitness	Skills	Achieve-ment	Aggres-sion	Winning	Remarks
1. Baseball	2%	21%	5%	0%	65%	0%	0%	7%	0%
2. Lacrosse	10%	25%	20%	0%	3%	5%	20%	5%	13%
3. Hockey	12%	13%	19%	4%	16%	2%	9%	5%	21%
4. Girls' baseball	21%	21%	7%	0%	14%	0%	0%	29%	7%

p < .0000
r = +.0252

2. V4 versus V10

Question 6 = What do you like least about your sport?

Sport versus Least

Sport	Nothing	Not playing	Coaching	Referees	Equip-ment	Drills and practice	Injuries	Losing	Aggression
1. Baseball	5%	58%	0%	2%	2%	12%	2%	16%	2%
2. Lacrosse	8%	17%	3%	17%	11%	3%	11%	7%	25%
3. Hockey	13%	11%	2%	4%	6%	16%	16%	13%	19%
4. Girls' baseball	0%	46%	0%	8%	0%	23%	0%	23%	0%

p < .0000
r = +.12827

3. V4 versus V11

Question 7 = Number of hours/week that you watch television during the summer?

Summer Television

Sport	Very low	Low	Medium	High	Very high
1. Baseball	41%	21%	19%	12%	7%
2. Lacrosse	54%	10%	17%	10%	10%
3. Hockey	27%	18%	30%	12%	12%
4. Girls' baseball	67%	0%	11%	11%	11%

Key

Very low	= 10 or less
Low	= 11-20 p<.1276
Medium	= 21-30 r = +.10041
High	= 31-40
Very high	= 41-50

4. V4 versus V12

Question 8 = Time of the day you watch television during the summer?

Sport versus Time 1

Sport	Nothing	Morning	Afternoon	Eve-
1. Baseball	0%	15%	18%	67%
2. Lacrosse	5%	17%	14%	64%
3. Hockey	0%	22%	7%	71%
4. Girls' baseball	0%	25%	17%	58%

p<.058
r = +.010

5. V4 versus V13

Question 9 = Number of hours that you watch television during the winter?

Winter Television

Sport	Very low	Low	Medium	High	Very high
1. Baseball	38%	32%	18%	9%	3%
2. Lacrosse	29%	23%	17%	9%	23%
3. Hockey	22%	22%	25%	14%	18%
4. Girls' baseball	86%	0%	14%	0%	0%

p<.0275
r = +.07366

6. V4 versus V14

Question 10 = Time of the day you watch television during the winter?

Sport versus Time 2

Sport	Morning	Afternoon	Evening	Nothing
1. Baseball	15%	26%	59%	0%
2. Lacrosse	17%	10%	71%	2%
3. Hockey	13%	9%	78%	0%
4. Girls' baseball	17%	0%	83%	0%

Key

Very low	= 10 or less
Low	= 11-20 p<.069
Medium	= 21-30 r = +.112
High	= 31-40
Very high	= 41-50

7. V4 versus V15

Question 11.1 = First choice—
What type of program do you like best?

First Best

Sport versus Program 1

Sport	Mystery	Comedy	Adventure	Drama	Cartoons	Sports
1. Baseball	13%	26%	8%	3%	18%	33%
2. Lacrosse	17%	17%	5%	5%	15%	42%
3. Hockey	7%	18%	5%	7%	17%	46%
4. Girls' baseball	25%	33%	0%	0%	33%	8%

p<.272
r = +.034

8. V4 versus V16

Question 11.2 = Second choice—
What type of program do you like best?

Second Best

Sport versus Program 2

Sport	Mystery	Comedy	Adventure	Drama	Cartoons	Sports
1. Baseball	19%	10%	13%	7%	32%	19%
2. Lacrosse	18%	38%	15%	3%	13%	13%
3. Hockey	9%	31%	11%	4%	23%	22%
4. Girls' baseball	27%	36%	9%	0%	27%	0%

p<.180
r = +.0006

9. V4 versus V17

Question 12.1 = First choice — Of these sport programs shown regularly on television, which do you watch most?

First Choice — Sport A — Regular Programs

Sport	Golf	Tennis	Bowl-ing	Base-ball	Basket-ball	Car-racing	Foot-ball	Wrest-ling	Hockey
1. Baseball	3%	3%	8%	26%	10%	0%	5%	0%	46%
2. Lacrosse	2%	2%	5%	2%	7%	17%	18%	9%	48%
3. Hockey	1%	1%	1%	5%	2%	3%	1%	3%	83%
4. Girl's baseball	0%	0%	17%	33%	17%	8%	0%	0%	25%

p < .000
r = + .19948

10. V4 versus V18

Question 12.2 = Second choice — Of these sport programs shown regularly on television, which do you watch most?

Second Choice — Sport B — Regular Programs

Sport	Golf	Tennis	Bowl-ing	Base-ball	Basket-ball	Car-racing	Foot-ball	Wrest-ling	Hockey
1. Baseball	3%	6%	3%	36%	11%	22%	0%	3%	17%
2. Lacrosse	0%	0%	5%	20%	15%	25%	8%	10%	18%
3. Hockey	7%	1%	1%	29%	11%	20%	13%	11%	6%
4. Girl's baseball	9%	9%	0%	18%	9%	36%	9%	0%	9%

p < .1831
r = −.02067

11. V4 versus V19

Question 13.1 = First choice — Of these sport programs shown occasionally on television, which do you watch most?

First Choice — Occ. 1 — Occasional Programs

Sport	Synchro-nized Swim-ing	Swim-ing	Skiing	Gym-nastics	Track and field	Horse-racing	Volley-ball	Soccer	Boxing
1. Baseball	8%	21%	3%	15%	13%	10%	0%	10%	21%
2. Lacrosse	5%	14%	11%	23%	14%	5%	0%	7%	23%
3. Hockey	3%	12%	11%	6%	18%	6%	3%	13%	28%
4. Girl's baseball	0%	0%	0%	42%	42%	8%	8%	0%	0%

$p < .0074$
$r = +.07353$

12. V4 versus V20

Question 13.2 = Second choice — Of these sport programs shown occasionally on television, which do you watch most?

Second Choice — Occ. 2 — Occasional Programs

Sport	Synchro-nized Swim-ing	Swim-ing	Skiing	Gym-nastics	Track and field	Horse-racing	Volley-ball	Soccer	Boxing
1. Baseball	6%	21%	6%	6%	27%	3%	9%	9%	12%
2. Lacrosse	2%	12%	10%	7%	24%	7%	7%	5%	24%
3. Hockey	2%	19%	11%	7%	21%	8%	4%	10%	18%
4. Girl's baseball	0%	50%	0%	8%	25%	8%	0%	8%	0%

$p < .7386$
$r = -.04955$

V4 versus V21 – V33

(Sport versus pro/amateur continuum)

*N = 259

Girls Baseball	Hockey	Lacrosse	Baseball	Over-all				Column A	Column B
7<93	38<62	40<58	38<62	40<63	A_1B	1.	ultimate goal	win and/or excel	partipate and play
39<62	45<55	34<66	45<55	43<57	A_2B	2.	aim	generalization—child's over-all development	specialization—child's skills development
7<93	64>36	56>44	37<63	55>45	A_3B	3.	Objective	work, to win aggression	partake for fun relaxation
7<93	38<62	43<57	35<65	37<63	A_4B	4.	rewards	Playing is its own reward no banquets or trophies	achievement should be rewarded by banquets and trophies
36<64	40<60	67>33	59>41	48<52	A_5B	5.	comitment of time	5 hours or less	6 hours or more
21<79	31<69	27<73	36<64	31<69	A_6B	6.	player selection	play the best most often	play everyone equally
8<92	24<76	39<61	21<79	25<75	A_7B	7.	rules application	letter of law (gamesmanship)	spirit of rules (sportsmanship)
85>15	45<55	50=50	50=50	49<51	A_8B	8.	scheduling emphasis	local and league competition	regional and state/provincial competition
9<91	35<65	36<64	25<75	32<68	A_9B	9.	evaluation of league success	by standings and competitors' calibre	on player improvement and numbers participating
15<85	47<53	44<56	23<77	41<59	$A_{10}B$	10.	decision-making level	state/provincial or national	local league
31<69	34<66	33<67	23<77	32<68	$A_{11}B$	11.	growth rate of child	control and rapid development	coordination and natural evolution
85>15	78>22	66>34	59>41	73>27	$A_{12}B$	12.	clichés	It doesn't matter if you win or lose; but how you play the game.	No excuse is adequate for losing. No cost is too high for winning
58>42	65>34	58>37	45<55	60>38	$A_{13}B$	13.	philosophy	A game worth playing is worth playing well	Any game worth playing is worth playing even if poorly

Television-Viewing Diary – Feelings and Behaviour – Total Hours versus Individual Listings

Data from the subjects' reports of television programs watched are presented in Table 3.1. The table indicates the number of programs listed over all respondents, that is, 234 children of the 256 responding report watching one program, 218 children report watching two programs, et cetera , with a mean of 5.52 and a standard deviation of 4.26. TV 001, which records the first individual show listed, shows 234 cases, with a mean of 2.7, plus or minus 1.2. The mean here is an aggression index resulting from categorization of all the programs seen on a five-point Likert scale (one equals very non-aggressive, two equals non-aggressive, three equals neutral, four equals aggressive, and five equals very aggressive). Thus, 2.7 would fall in the neutral range leaning towards non-aggressive. TV 007 provides the data (218 cases) for the second program listed (men – 2.6 , plus or minus 1.2). All programs listed can be read in a similar manner down to the eighteenth (TV 103 where the number of cases dropped to 19 with a mean of 2.4 plus or minus 1.2).

Pearson Correlation – Television-Viewing Diary – Total Hours versus Aggression Index

In order to ascertain any correlation between the number of hours viewed and the various individual shows listed, a Pearson correlation coefficient was run (hours versus TV 001 – TV 103). As seen in the table below, in four instances a significant relationship was found. *TV 001 – correlated positively at + .117 indicating that the higher the number of hours the subject viewed television, the higher the aggression content of those programs listed and viewed; or conversely, the lower the number of hours, the lower the aggression content.* The number of hours and TV 005 correlates positively at + .18; TV 097 at + .25 and TV 103 at + .4l. The fact that all of these correlations are positive and increase would appear to support the thesis that the more television that the subjects watched, the higher their aggression index.

In order to gain further insight into the relationships between television-viewing and sports participation, the sports/athletics participation was cross-tabulated with the aggression index for TV 001 (see below). *No significant difference or association was detected; however, in general, boys' and girls' baseball players watch very non-aggressive or non-aggressive television programs, while hockey and lacrosse players watch aggressive and very aggressive programs.*

Table 3.1

Television Viewing Diary—Individual Listings

Variable		Cases	Mean	Standard deviation
Total hours		256	5.5234	4.2693
1st show listed	TV 001	234	2.7137	1.2323
2nd	007	218	2.6468	1.2841
3rd	013	202	2.8317	1.3682
4th	019	185	2.7946	1.2815
5th	025	158	2.7278	1.4216
6th	031	137	2.7810	1.2988
7th	037	116	2.6724	1.2634
8th	042	103	2.6990	1.2821
9th	048	88	2.8636	1.3234
10th	055	60	2.9500	1.2545
11th	061	54	2.7037	1.2831
12th	067	49	2.9592	1.2069
13th	073	45	3.0000	1.3484
14th	079	44	2.2273	1.1981
15th	085	41	2.4390	1.3238
16th	091	36	2.5278	1.2068
17th	097	28	2.7500	1.1746
18th	103	19	2.4737	1.2188

Table 3.2

Television-Viewing Diary; Total Hours Correlated with Individual Listings on the Television-Aggression Index

Pearson Correlation Coefficients
(Hours versus TV 001 – TV 103)

	TV 001	TV 007	TV 013	TV 019	TV 025	TV 031	TV 037	TV 043	TV 049	TV 055
Hours	.1174									.1868

	TV 061	TV 067	TV 073	TV 079	TV 085	TV 091	TV 097	TV 103
Hours							.2587	.4155

*Note—only significant values of r are recorded

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V4 versus V34

Sport versus TV 001

Sport	Very non-aggressive	Non-aggressive	Neutral	Aggressive	Very aggressive
1. Baseball	37%	18%	26%	5%	13%
2. Lacrosse	16%	37%	34%	5%	8%
3. Hockey	10%	38%	9%	36%	6%
4. Girls' Baseball	43%	21%	14%	14%	7%

Cross-Tabulation – Television-Viewing Diary Listings with Opinionnaire Items

The television programs listed at each of the 18 recording positions were cross-tabulated with the other data secured on the opinionnaire. The cross-tabulations that were significant (along with the Kendall Tau television diary listings with opinionnaire items) are indicated.

It can be seen that TV 001 was significantly associated (p<.000) with TV 003 – question 11 ("What type of program do you watch?"). The correlation was negative, indicating that the higher the rating on the television aggression index the lower the response on the motivation index. That is, those who watched very aggressive or aggressive programs (four and five on the vertical axis) watched them for "fun and action" (one and two on the horizontal axis). Conversely, those who listed very non-aggressive programs listed "mystery and interesting" along with "fun". Although the chart is not shown, the second programs listed (TV 007) and fifth programs listed (TV 043) were also found to be significantly associated with the aggressive index (p<.03 for both).

The third programs listed (TV 013) were significantly associated with the behaviour of parents (011) (p< .007). Analysis of the percentage responses show that when the subjects watched very non-aggressive or very aggressive shows, parents for the most part didn't watch them (61 per cent and 67 per cent respectively); whereas when children/youth watched non-aggressive, neutral, or aggressive shows there was an inclination for parents to watch them (61 per cent, 64 per cent, and 55 per cent).

On the third programs viewed (TV 013), a significant relationship (p<.03) and a high negative correlation (-.20) was shown with the frequency with which the subjects watched the program. It can be seen that the less aggressive the content, the higher the probability that they watched the program only sometimes; while

conversely, the higher the aggression content the higher probability that they always watched the program.

The eight programs listed (TV 043) were significantly associated with "after watching this I feel 😊 'happy', 😐 'neutral', or 🙁 'sad' ", (p<.04 and +4.13). This indicated that the more aggressive the program, the sadder the post-viewing feeling; or conversely, the less aggressive the program, the happier the after-program feeling.

Of the ninth programs listed (TV 049), significant association and positive correlation (p<.03) and +r -.23) was shown with "I watch this program because" very non-aggressive or non-aggressive programs are "fun and action"; whereas the neutral, aggressive, and very aggressive programs are high in "interest, mystery, and acting".

The thirteenth programs listed (TV 073) were significantly and positively associated with parental behaviour (p<.01 and +r = .07). This shows that, in general, as the subjects were viewing neutral, aggressive, or very aggressive material, the parents "didn't care" or indeed a high percentage "liked it" (aggressive equals 80 per cent, and very aggressive equals 57 per cent); whereas when the subjects were watching very non-aggressive programs, 83 per cent of parents "liked it". Another interesting analogy to come out of this chart is the fact that the number of parents of the subjects who watch very non-aggressive or non-aggressive programs who and "don't care" is low (17 per cent and 0 per cent respectively); whereas the number of parents of those who watch neutral, aggressive or very aggressive programs is relatively high (60 per cent, ten per cent and 43 per cent respectively).

The seventeenth show programs listed (TV 097) were associated significantly and positively (p<.001 and +r .11) showing that the higher the aggressive index-rating of the programs listed, the higher the probability that the parents "don't watch", or the lower the aggressive content, the higher the probability the parents "will watch" the program. It should be pointed out that no programs of a very aggressive nature were listed among the 28 cases. Similarly, among the eighteenth programs listed, no very aggressive programs were listed among the 19 cases. There was a significant association and positive correlation (p<.005 and +r .42). indicating that the lower the rating on the aggressive index, the more the programs were watched for "fun" and the higher the rating, the more they were watched for "mystery and interest".

The television diary was arranged by a panel of experts on a semantic differential ranging from very non-aggressive (1) to very aggressive (5). Cross-tabulation of the various responses were similarly arranged on a semantic differential from the least aggressive to the most aggressive. Viewing this random sample of up to 18 entries provided the following observations.

1. The respondents indicate that the more violent the program, the more likely they will watch it "always".

2. Aggressive and very aggressive programs are watched for the "mystery, interest and acting"; and non-aggressive and very non-aggressive programs are watched for the "fun and action among the heavy television viewers (ninth to eighteenth programs listed); whereas among light television viewers (first to eighth programs listed), very aggressive and aggressive programs are watched for "fun and action", while very non-aggressive and non-aggressive programs are watched for "mystery, interest, and action";

3. In general, parents like it when their children watch television, regardless of the aggressive rating; 50 per cent don't like it when their children watch non-aggressive programs; and a high percentage (43 per cent) don't care if their children watch very aggressive programs (See thirteenth programs listed, TV 073 vs TV 076).

4. Parents are inclined to watch aggressive programs with their children and not to watch very non-aggressive programs.

5. Regardless of the aggression content, children feel happy ☺ , in general, after watching television. It can be added, however, that the more violent the program the more likely the children will feel sad ☹ or unhappy after viewing it.

Cross-Tabulations

Television Diary Listings with Opinionnaire Items

Question—What type of program do you watch?

First programs listed
TV 001	Fun	Action	Mys-tery	Inter-esting	Acting
1. Very non-aggressive (VNA)	non-44%	6%	14%	31%	6%
2. Non-agres-sive (NA)	76%	13%	1%	8%	1%
3. Neutral (N)	41%	11%	0%	32%	16%
4. Aggressive (A)	70%	9%	2%	13%	7%
5. Very aggres-sive (VA)	53%	35%	0%	12%	0%

p<.0000
r=−.02775

Question—When this show is on, my parents . . .

TV 011

Second programs listed
TV 007	Watch it	Don't Watch it
1. VNA	39%	61%
2. NA	61%	37%
3. N	64%	36%
4. A	55%	45%
5. VA	17%	67%

p<.0079
r=−.02064

Question—I watch this show . . .

TV 014

Third programs listed
TV 013	Always	Sometimes
1. VNA	21%	79%
2. NA	34%	66%
3. N	46%	54%
4. A	50%	50%
5. VA	52%	48%

p<.0390
r=−.20823

Key:
VNA —Very non-aggressive
NA —Non-aggressive
N —Neutral
A —Aggressive
VA —Very aggressive

Question—After watching this show I feel . . .

TV 048

Eighth programs shows listed
TV 043	Happy	Neutral	Sad
1. Very non-aggressive (VNA)	76%	24%	0%
2. Non-aggressive (NA)	50%	50%	0%
3. Neutral (N)	52%	24%	24%
4. Aggressive (A)	61%	17%	22%
5. Very aggressive (VA)	57%	29%	14%

p<.0418
r=+.13111

Question— I watch this show because . . .

TV 051

Ninth programs listed
TV 049	Fun	Action	Mys-tery	Inter-esting	Acting
1. VNA	73%	13%	7%	8%	0%
2. NA	63%	17%	0%	17%	4%
3. N	7%	29%	14%	29%	21%
4. A	43%	29%	14%	10%	5%
5. VA	20%	50%	0%	20%	10%

p<.0333
r=+.22931

Key:
VNA —Very non-aggressive
NA —Non-aggressive
N —Neutral
A —Aggressive
VA —Very aggressive

Question—When this show is on, my parents . . .

TV 076

Thirteenth program
listed

TV 073	Like it	Don't Like it	Don't care
1. VNA	83%	0%	17%
2. NA	50%	50%	0%
3. N	20%	20%	60%
4. A	80%	10%	10%
5. VA	57%	0%	43%

Question—When this show is on, my parents . . .

TV 101

Seventeenth program
listed

TV 097	Watch it	Don't watch it
1. VNA	75%	25%
2. NA	67%	33%
3. N	100%	0%
4. A	71%	29%

p<.0013
r = +.11110

Question—I watch this show because it is . . .

TV 105

Eighteenth programs
listed

TV 103	Fun	Action	Mystery	Interesting
1. VNA	60%	40%	0%	0%
2. NA	83%	0%	17%	0%
3. N	0%	0%	0%	100%
4. A	20%	0%	60%	20%

p<.0050
r = +.42006

Key: VNA —Very non-aggressive
NA —Non-aggressive
N —Neutral
A —Aggressive

Summary

The results of the written opinionnaire served two major purposes:

1. It assured that there is no significant difference within the sub-group samples (that is, those being exposed to pro-social or anti-social models or those serving as a control from within each of baseball for boys and girls, lacrosse, and hockey),

2. It provided descriptive data on the sports/athletics and television-viewing habits, preferences, and feelings of the children/youth.

General conclusions can be drawn as follows:
1. Children participate in sports/athletics for the skills, the game itself, the action, the rewards, and the fun and enjoyment; they like least about sports/athletics not playing, aggression, drills and practices, and, of course, losing.

2. Television-viewing is only slightly heavier in the winter than in the summer and is watched mainly in the evening. In both the winter and the summer, the number of hours children/youth view television makes it a significant force in their education and development. Television certainly rivals the family and school as a significant other influence in the life of the child/-youth.

3. Children/youth watch mainly sports, cartoons, and comedy; therefore, any emphasis in terms of decreasing anti-social role models or conversely increasing pro-social role models should be directed to these three content areas.

4. Of the sports shown most frequently on television, hockey is the most significant for Canadian children/-youth who are active in sports in Southwestern Ontario, followed at a very distant second by other popular athletic spectator activities such as football, baseball, and basketball.

5. Of the sports occasionally shown on television, boxing ranks first in preference, followed at quite a distance by the high level Olympic-type sports which are for the most part viewed as pro-social (track and field, swimming, gymnastics, et cetera).

6. In terms of sports/athletics participation, the majority favour the *amateur sports model* as opposed to the *professional athletics model*.

7. Children/youth involved in hockey and lacrosse prefer more aggressiveness and violence in both their sports/athletics activities and in their television viewing diet. Those involved in baseball (both boys and girls) are less inclined towards aggression and violence either in their sports or in their television-viewing.

8. The higher the number of aggregates listed in the television-viewing diary, the higher the probability that the programs viewed will be aggressive.

9. From the television-viewing diary, we can see that the more violent the program is, the more likely it will be "watched always", and that the parents will join the child/youth in watching the program.

10. Parents like it when their children watch television, regardless of the aggression index; 50 per cent don't like it when their children watch non-aggressive programs; and a high percentage (43 per cent) don't care if their children watch very aggressive programs.

Chapter Four

Pro-Social and Anti-Social Television-Viewing Treatment and Effect as Reflected in Facial and Verbal Reaction

In order to identify the specific effect of pro-social or anti-social media models on the perception of aggression and violence and on actual behaviour while subjects viewed videotapes, extensive monitoring of behaviour was conducted by the media observation project team. This chapter reports the procedures and observations of the media project team responsible for projecting the television models and recording the response of the subjects.

Liaison with the Sports/Athletics Organizations

Liaison with the sports /athletics organizations which provided the laboratory/field situation for this research project was initially secured through the University of Windsor Sports Institute for Research/Change Agent Research. SIR/CAR has conducted numerous studies throughout Southwestern Ontario, as well as specific studies on behalf of the three organizations that were to be involved: St. Clair Hockey School, the Windsor Minor Lacrosse League, and Windsor District 5 Little League Baseball (Windsor Sandwich East League). The St. Clair Hockey School in Tecumseh, Ontario, provided the best laboratory situation, since the children/youth were committed to the school five days per week for approximately seven hours per day. The lacrosse observations and treatments were held in conjunction with the Windsor Minor Lacrosse Instructional and Participation League, which provides exposure of children/youth to lacrosse for periods of up to two hours a day, two or three times per week. During this time the children/youth receive instruction and engage in scrimmage. The Windsor Sandwich East Baseball League (of Windsor District 5 Little League Baseball) required observation of subjects during early season league games (usually two times per week) and television exposure at a separate location two times per week.

Cooperation from all three organizations was excellent; however, there can be little doubt that hockey provided the best laboratory/field situation, followed at quite a distance by lacrosse and baseball.

Over a three-week period, the hockey school provided three matched groups on successive weeks, each of which was available throughout the entire day for five consecutive week-days. Time was structured for both hockey instruction and scrimmage games (as well as a limited number of other sports/athletics activities), providing an excellent controlled environment in which to test the actual effect of pro-social and anti-social television models. To a certain extent, similar conditions existed in lacrosse, but unfortunately were interfered with by the fact that the lacrosse school coincided with the telecasting of the Olympic games. This resulted in a decline in over-all participation at the lacrosse school (and, of course, in the treatment as well as in the pre- and post-testing). The major problem in baseball was the logistics of moving children/youth about to secure exposure to pro- and anti-social television inputs as well as the uncertainty that surrounds any outdoor activity dependent on the weather for the holding of games. The effects of these organizational challenges are reflected in the size of the N and the strength of the data for hockey, lacrosse, and baseball. It should be noted that the N for girls' baseball is extremely low due to the fact that this league is in the formative stage. Further, girls who participate do not come from one geographic region (Windsor Sandwich East), but rather are drawn from all eight little league regions in District 5. The following specific liaison reports indicate in more detail the procedure utilized in providing treatment as well as pre- and post-testing.

Hockey

The school's players were divided into three groups (A, B, and C) on the basis of skill and age; all groups were to be observed. The hockey liaison then went to the hockey school. The areas for presenting the films and the binocular-rivalry testing were viewed. An area for storage equipment was requested.

Hockey films were shown to the three separate groups on Tuesday and Thursday for 30 to 40 minutes. The pro-social and anti-social groups received the appropriate treatment while the control groups received no television-viewing input. A portable videotape unit was set up during the films to view the subjects. Slides were taken of all events at the hockey school to serve as a

permanent record and as a cross-check of personal observation data. During treatment films, observation of the subjects' behaviour was recorded at three-minute intervals.

Lacrosse
During all film sessions, facial expressions of the players were recorded at three-minute intervals. During the intervening three minutes, vocal reactions (positive or negative) were recorded. Anti-social and pro-social television presentations (and for the youngest group, control presentations) were shown to the three age groups on Tuesday or Wednesday for two consecutive weeks. Presentations were shown to the oldest group of players, the midget/juveniles, on Tuesday nights after league games. During all film sessions, the facial expressions of the players were recorded at three-minute intervals. During the intervening three minutes, vocal reactions (positive or negative) were recorded.

Baseball
Anti-social and pro-social television presentations were made during the second week of the baseball study on Tuesday and Thursday. Each tape was approximately 30 minutes in length. While the players watched the videotapes, facial expressions were recorded at three-minute intervals. Between each record of facial expressions a continuous count of vocal reactions were recorded.

Television-Viewing Treatment
The television-viewing treatment was the responsibility of the media project team. Both members of the team had previous training in the SIR/CAR system and in media studies, and both had practical experience in using audio-visual equipment. This project team had a two-fold responsibility:
1. securing, categorizing, and projecting pro-social and anti-social television-treatment tapes, and
2. recording and monitoring by television and 35 mm slides the reactions of subjects while they viewed the television videotapes, as well as the subjects' behaviour during participation in their sports/athletics activities, pre- and post-treatment.

Procedure for Collecting Data During Treatment Sessions
A one-half-inch portable videotape unit, or portapak, was used as an observation tool. Observations with the portapak were coordinated with observations made by personal observers using the "Faces Behavioural Scales"[1]
During the combined observation and treatment, the tape counter numbers were noted on both the recording machine and the playback machine. With this provision, any overt reaction noticed on the recorded portapak tape could be checked with the content of the treatment tape immediately preceding the reaction.

The following illustration shows a typical set-up of media tools for treatment and observation.
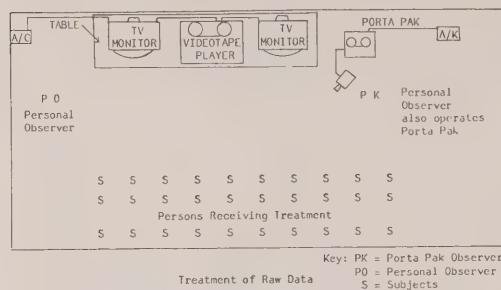
Over 400 35 mm slides were taken in an attempt to illustrate all aspects of the research project. Records were kept for each roll of film used and included the data, place and time of the event, and the type of event.

Monitoring Facial Expressions and Vocal Reaction During Treatment
Psychology Professor Paul Ekman has conducted studies to assess the correlation between the behaviour of children while viewing televised aggression and violence, and their subsequent aggressive behaviour.[2] Eckman's studies indicate that children/youth who smile and appear happy while viewing aggression and violence subsequently behave in a more aggressive or violent way than children who are indifferent or frown while watching television aggression or violent television programs.[3]
Personal observation sheets used in previous studies were amended and adapted to record the facial expressions and positive or negative verbal reactions of children/youth viewing pro-social and anti-social videotapes. (A sample observation form is provided in Appendix D.)

Analysis
In order to arrive at over-all percentage values for each sport by treatment combination, data were summed over all of the three-minute-interval observations to obtain the total number of each facial expression and vocalization type for each sport for both the pro-social and anti-social television presentations in each sport. The ratio of the number of particular expressions observed in that group to the total number of expressions observed yielded the percentage for each.
The distribution of facial expressions during the viewing of a television presentation reveals no marked differences across sports activities or treatment conditions in the percentages of smiles, neutral expressions, or frowns (see Table 4.1). The over-all summary suggests a tendency towards more expression, that is,

fewer neutral faces and more smiles and frowns, among the anti-social treatment group than among the other groups. An examination of the percentages of different facial expressions by sports, however, reveals that this is largely due to higher percentages of smiles and frowns among the baseball players while watching the anti-social presentations. In general, baseball players showed the largest percentages of smiles and frowns and the smallest percentages of neutral expressions.

Facial expressions were dominantly neutral throughout, regardless of the specific presentation. A somewhat greater tendency to smile seems to be present among both the hockey and baseball players relative to the lacrosse players, and a slightly greater tendency to frown appears among the lacrosse and baseball players relative to the hockey players.

Table 4.1

Summary of Distribution of Facial Expressions During Television-Viewing

Overall

	Smiles	Neutral	Frowns	
Pro-social	14.58%	84.25%	1.17%	100%
Anti-social	18.99%	76.34%	4.67%	100%
Control	12.50%	87.50%	.0%	100%

Hockey

	Smiles	Neutral	Frowns	
Pro-social	15.38%	84.62%	.0%	100%
Anti-social	13.61%	86.39%	.0%	100%

Lacrosse

	Smiles	Neutral	Frowns	
Pro-social	9.93%	86.09%	3.97%	100%
Anti-social	9.22%	88.02%	2.76%	100%
Control	12.50%	87.05%	.0%	

Baseball

	Smiles	Neutral	Frowns	
Pro-social	16.54%	82.56%	0.90%	100%
Anti-social	24.07%	68.75%	7.18%	100%

Note: Since there was no television exposure for the control groups in hockey and baseball, there obviously can be no observation on facial expression and/or positive or negative verbal behaviour.

The distribution of vocalizations must be interpreted in a somewhat different way from the data on facial expressions. While all children observing the films exhibited some facial expressions that could be classified into a smiling, neutral, or frowning category, all the children did not necessarily vocalize during the films. Thus, the percentages of positive and negative vocalizations are based on the total number of vocalizations that actually occurred during a viewing session (see Table 4.2).

In general, when vocalizations occurred, they tended to be positive. It will be noted that in no case was the percentage of positive (as opposed to negative) vocalizations less than 50 per cent and was more characteristically in the region of 80 per cent.

Among the lacrosse and hockey players, those viewing the pro-social presentations were slightly more positive in their vocalizations than were those viewing the anti-social presentations. The major difference between these two groups was that the lacrosse players tended to emit proportionally more negative vocalizations over-all.

Vocalizations among the baseball players show a rather different pattern. Negative vocalizations were more common in general and the percentage of negative vocalizations during the pro-social television presentation is strikingly higher than in any other treatment/sport combination.

Table 4.2

Summary of Distribution of Vocalizations During Television-Viewing

Overall

	+Vocalization	−Vocalization	
Pro-social	61.59%	38.41%	100%
Anti-social	85.74%	14.26%	100%
Control	86.36%	13.64%	100%

Hockey

	+Vocalization	−Vocalization	
Pro-social	100.00%	.0%	100%
Anti-social	90.91%	9.09%	100%

Lacrosse

	+Vocalization	−Vocalization	
Pro-social	82.61%	17.39%	100%
Anti-social	76.12%	23.88%	100%
Control	86.36%	13.64%	100%

Baseball

	+Vocalization	−Vocalization	
Pro-social	53.56%	46.44%	100%
Anti-social	86.22%	13.78%	100%

Chapter Five

Binocular Rivalry: Assessing the Effect upon Perception of Aggression Resulting from Exposure to Pro-Social and Anti-Social Television Models

Binocular rivalry has previously been utilized to test the effect of the degree of involvement of children/youth in little league all-star baseball on their perceptions of aggressive, violent, or hostile stimuli.[1]

In normal viewing, the two eyes receive consistent images. In binocular rivalry different slides are presented, one to each visual field. The effect of such a presentation is that one of the images presented dominates and this dominant image is reported by the viewer. In the present study, binocular-rivalry tests were carried out before and after experimental treatment in order to determine what influence this treatment might have on the perception of the slides. These data were obtained only for the hockey group.

Stimulus Materials
Sixteen slides were selected by the experimenters for presentation. The activities represented were baseball, tennis, football, hockey, surfing, and fitness. These activities are not specifically representative of Canadian culture, but they do represent a varied cross-section of athletic and sporting events with which Canadian children/youth are familiar.

The final decision for the selection was based on content similarity, picture quality, and brightness. Every attempt was made to reduce differences that might influence choice in the binocular-rivalry situation. All slides were black and white so that no colour preference would be detected. Two pairs of slides were intentionally matched as lie slides. Pictures presented to the monocular fields were either both aggressive or both non-aggressive in nature.

The following illustration outlines the actual presentation format:

Pair	Left Eye	Right Eye
Slide #1/9	men standing around in sweat-suits (NA)	men centring footballs (NA)
Slide #2/10	a hockey fight behind the net (A)	a hockey fight in front of the net (A)
Slide #3/11	a hockey fight (A)	a goalie standing in net (NA)
Slide #4/12	men tackling and diving at a football (A)	a man throwing a football (NA)
Slide #5/13	a surfer falling (A)	a man surfing (NA)
Slide #6/14	a man lying down injured on a tennis court (A)	two men playing tennis (NA)
Slide #7/15	a ball-player holding another ball-player and interfering with the play (A)	a batter (NA)
Slide #8/16	a ball-player swinging a bat at another ball-player's head (A)	ball-players lined up for a picture (NA)

Slides 9 to 16 are the reverse of slides 1 to 8.

Pairs 1 (non-aggressive) and 2 (aggressive) served as lie slides. For pairs 3 to 8, the aggressive slides were presented to the left-eye field of the observer. Thus, the left-eye field for these pairs represented the aggressive slides, while the right-eye field represented the non-aggressive slides. Subsequently, the slides were reversed and shown again to the subjects so that the left-eye field was exposed to non-aggressive pictures in slides 11 to 16, while the right-eye field was exposed to aggressive pictures. In the reversal of the slides, shown as 9 to 18 which control for any right- or left-eye dominance effect, the number of aggressive or non-aggressive slides shown to each eye was equated. All slides were kept in a small file box and could be removed or returned without disturbing the original order.

Testing Procedure

For each of the three treatment groups, pre- testing and post-testing were carried out on the Monday and Friday, respectively, of the subjects' attendance at the hockey school. Media-treatment sessions occurred on the Tuesday and Thursday of the week for the anti-social and pro-social treatment groups. There was, then, a 24-hour interval between the second media-treatment session and the binocular-rivalry post-testing.

Subjects were selected randomly from among the participants. As a control for constant error from the presentation-order format, the schedule of presentation was rotated for each subject. The viewing exposure for each trial was .05 seconds. This exposure time helped to eliminate alternation or confusion of images and also guarded against the possibility that the subject might be able to see two scenes superimposed on each other. The responses were recorded on the afore-mentioned score-sheet. Each subject was tested individually. Subjects rested their eyes against the viewer with their hands resting at the base of the stand. The subjects were reminded to keep both eyes open during the brief exposure-viewing time. Initially, the subjects turned their backs on the apparatus while the experimenter inserted the slides. This procedure prevented the subjects from detecting that two separate slides were being inserted for one trial and it prevented the subjects from viewing any slide before the actual test situation.

The subjects were told that the viewing-exposure time for each trial would be .05 seconds and that they could observe the slide as many times as necessary. After viewing, they were to describe as best they could what was happening in the picture. The subjects were told that they would see activity slides and that it was not necessary to identify the activity unless they felt that by reporting it, it would help them to describe the pictures. The subjects were assured that there were no right or wrong answers, but that their responses would depend upon their eye dominancy. This procedure was designed to ensure that subjects would keep both eyes open during testing.

After this, the experiment began. The subject turned away while the experimenter inserted the appropriate pair of slides. After each viewing exposure, the subject was asked what he thought was happening in the picture. If the subject was not sure what he saw, he was allowed subsequent views at the same viewing time (.05 second). The subject then turned away from the apparatus while the slides were removed. The subjects' responses were recorded on prepared data sheets (sample provided in Appendix C).

Analysis of the Data

The data on the number of aggressive identifications at each measurement time for each treatment group are presented in Table 5.1. Change scores indicate the change in the number of aggressive slides identified from pre-test to post-test. An analysis of variance was carried out on the difference scores. The effect of treatment approaches significance ($F(2,43) = 2.86$, p ($p < .10$). It will be noted, however, that it was the control group that differed from the other treatment groups (pro-social and anti-social), but that these two groups were not different from each other. The control group showed a substantial decrease in the identification of aggressive slides. The pro-social treatment group showed a slight decrease, while the anti-social treatment group showed a slight increase in such identification over the period studied.

Table 5.1

Number of Aggressive Slides Perceived During Pre-Test and Post-Test by Experimental Treatment

Hockey

	Pro-Social T/V			Anti-Social T/V			Control (No. T/V)		
	Week 1			Week 2			Week 3		
Project No.	Pre	Post	Change	Pre	Post	Change	Pre	Post	Change
1	5	3	−2	4	2	−2	9	9	0
2	5	6	1	6	0	−6	9	0	−9
3	8	8	0	3	1	−2	9	10	1
4	3	5	2	4	9	5	7	0	−7
5	6	2	−4	4	7	3	6	6	0
6	5	4	−1	5	7	2	3	3	0
7	2	4	2	4	6	2	7	0	−7
8	2	4	2	1	2	1	2	4	2
9	1	2	1	4	4	0	1	4	3
10	2	2	0	11	11	0	3	0	−3
11	2	5	3	4	6	2	8	0	−8
12	6	2	−4	7	9	2	3	0	−3
13	5	1	−4	4	2	−2	4	0	−4
14				5	3	−2	3	1	−2
15				5	5	0	0	3	3
16				5	3	−2			
17				2	5	3			
Totals	52	48	−4	78	82	4	74	40	−34
Average	4	3.69	−.31	4.58	4.82	.24	4.93	2.67	−2.26

Discussion

The results of this portion of the study would seem to imply that: (1) viewing anti-social television models slightly increases identification of violence ; (2) viewing pro-social television models slightly decreases identification of violence; and (3) withholding of exposure to either pro-social or anti-social television models substantially reduces identification of violence.

It is possible that the interval between the treatments and the post-testing (24 hours) was too long to sustain any substantial effect on perception. Results may have been different had the second binocular-rivalry testing immediately succeeded the television treatments. It is also possible that the effect of exposure to the television treatments is content specific, that is, the perception of hockey aggression may be influenced while the perception of aggression in other sports may not be influenced . The test slides presented included only one aggressive – non-aggressive pair of hockey activities. The five other test pairs concerned other sports. It is not possible to assess the potential effects of these variables on the basis of the present data. If either or both were operative, we would expect that they would weaken the effect, that is, they would reduce the pre-test to post-test difference. Thus, even though the treatment effects are not significant, the direction of change may be taken as suggestive.

Chapter Six

Behavioural Observation

Before considering specific findings regarding relationships between television inputs and behaviour, several features of the present study deserve emphasis, since they differ from other studies in this area. (1) Data were collected for team behaviour rather than individual behaviour. The reason for the adoption of this procedure is that members of a team interact with each other over a considerable period of time and thus would be expected to mutually influence each other's behaviour. The behaviour of any individual player is, then, not really independent of the team. (2) We examined fairly long-term effects of exposure to media, that is, from 24 hours to one week intervened between media treatment and observation of behaviour. Immediate effects were not examined and, thus, our results cannot speak to the question of immediate effects.

A summary of the over-all findings are presented in Table 6.1. The table contains two sets of findings for each of the sports considered in the study. One set of results headed "Experimental Television" indicates the relationships found between the experimentally provided media inputs and the observed behaviour. The column headed "Order of Means" indicates which group of teams showed the lowest, intermediate, and highest levels of the behaviour in question. The column headed "w^2" indicates the proportion of variability among the teams that can be attributed to the experimental input.[1] For example, among the hockey teams, those assigned to the anti-social media input showed the lowest levels of aggressive behaviour, those teams assigned to the pro-social media input showed the next highest levels of aggressive behaviour, and those teams assigned to the control condition showed the highest levels of physical aggression on the ice. The experimental treatment accounts for 10.3 per cent of the variability among the teams on this measure.

The second set of results in the table indicates the relationships between the degree of aggressiveness in the programs the teams report watching at home and the amount of the indicated behaviour the players show on the ice. The column headed "r" indicates the direction and strength of the relationship. A negative

sign on the value in this column indicates that the less aggressive the media input, the higher the level of the behaviour in question. The column headed "r^2" indicates the proportion of variability among the teams that can be attributed to this relationship. For example, among the hockey teams, the positive relation of .307 indicates that teams that select more aggressive programs to watch are the teams that are more physically aggressive. This relationship accounts for 9.4 per cent of the variability among the teams. With regard to the television-selection data, causal inferences are not warranted. Several plausible explanations may be offered for such relationships. A team may be more aggressive because it watches more aggressive television; conversely, a team may prefer to watch more aggressive television because it is more aggressive; or a team may watch more aggressive television *and* be more aggressive because of some unknown factor, such as, parental permissiveness of aggression.

Analysis of the data regarding the relationships between media inputs and behaviour on the playing-field lead to two over-all conclusions. The first conclusion is that exposure to pro-social media inputs appears to be strongly related to increased levels of pro-social behaviour among the player-viewers. In two of the three sports (hockey and lacrosse), the relationship between pro-social inputs and pro-social behaviours are strong and consistent over both the experimentally provided media presentations and the players' self-selected media inputs, that is, programs they regularly watch. Since the two sources of media input are independent, a relationship that appears in both cases must be considered to have a real significance.

The second conclusion is that we have not found evidence to support the contention that exposure to anti-social media inputs leads to increased levels of aggressive behaviour among the player-viewers. In none of the three categories of aggressive behaviour observed are there strong and consistent relationships in that direction.

In general, we did not find treatment effects apparent after a 24-hour interval and not after a longer interval. There is a suggestion of such a trend, however, in the

data for non-verbal symbolic aggression. Teams exposed to the anti-social treatment presentations showed slightly higher levels of this behaviour than did the pro-social treatment groups after the shorter interval, but not after the longer interval. This trend is consistent across all three sports and all age levels with the exception of the youngest lacrosse players. This trend, in the absence of similar trends for other behaviour, suggests that this kind of behaviour may be modelled more readily than other aggressive behaviour but that it dissipates relatively quickly over time.

Some comment is warranted on the over-all conclusions. The finding regarding the effect of pro-social inputs is of considerable practical import. Those sports in which the effect is strongest are also those in which the orientation of the children reflects more professional athletics values. We may expect that this orientation makes them particularly susceptible to the behaviour model provided by the professional athlete. In this context, the highlighting of pro-social behaviour among professionals might be expected to be particularly effective in producing such behaviour among young players.

The fact that anti-social media presentations do not seem to produce higher levels of aggressive behaviour should be interpreted cautiously. For one thing, there may be immediate effects that would not appear after a delay. It is also possible that against a background of televised athletics in which there is considerable aggression, the presentation of a further hour to our subjects was not sufficient to elicit differences.

While the general findings suggested above are reasonably consistent across the three sports, there are variations. There appear to be two possible interpretations for these differences. One possibility is that the failure of a result to be replicated across all sports and the two types of media input is an indication of unreliability of that result. The second possibility is that individuals differ in their reaction to various types of media input. It is noteworthy that individual choice is involved in the selection of which sport an individual will play. Those characteristics that lead an individual to play hockey may be quite different from the characteristics that lead one to play baseball and may involve both physical and personality factors.

Thus, we will examine the patterns of results in each of the sports separately and in greater detail.

Data Collection Procedures

Before the baseball, lacrosse, and hockey schedules had begun, the core staff of observers developed coding forms for each sport (a sample form for each sport has been included in Appendix D). Provisions were made in the form for some qualitative as well as quantitative assessment of the behaviour observed, be it pro-social or aggressive behaviour. All major categories of behaviour that were recorded on the form were clearly defined by the core observation staff. Observers were

Table 6.1

Summary of Analyses of Variance and Self-Selected Television Data for All Groups

Behaviour Category	Experimental Television		Television Selection	
	Order of Means	w^2	r	r^2
Hockey				
Physical aggression	A-P-C	.103	.307	.094
Non-verbal aggression	A-C-P	.116	−.447	.200
Verbal aggression	A-C-P	.656	−.392	.154
Pro-social behaviour	A-C-P	.613	−.533	.284
Lacrosse				
Physical aggression	C-P-A	0	−.280	.079
Non-verbal aggression	A-P-C	.006	−.420	.177
Verbal aggression	C-A-P	0	.680	.462
Pro-social behaviour	A-P-C	0	.441	.194
Baseball				
Physical aggression	C-P-A	.194	−.601	.361
Non-verbal aggression	C-A-P	.492	.130	.017
Verbal aggression	A-P-C	0	.261	.068
Pro-social behaviour	A-C-P	.062	.631	.398

A = Anti-social treatment teams
P = Pro-social treatment teams
C = Control teams
w^2 = Proportion of variability accounted for by experimental treatment
r = Pearson correlation between self-selected television-viewing and the variable
r^2 = Proportion of variability accounted for by the relationship between self-selected television-viewing and the variable

trained to identify instances of the behaviour according to these operational definitions.

Observers from among graduate students and senior undergraduates were employed. All persons were adequately paid for their work to encourage responsible and reliable performances. They were instructed in the use of the coding forms and were shown how all relevant behaviours were to be recorded. Slight modification of the basic form was necessary for baseball, since some behaviours -- for example, stick-to-stick contact -- which are quite prevalent in hockey and lacrosse are absent in baseball. During the course of the project, a total of 13 observers were employed, including the core staff of three.

The assignment of observers to leagues, age groups, and teams was done at random, so that no one observer saw mostly one league, one age group, or one team.

Operational Definitions

Verbal aggression is audible speech directed towards self or others that in some way demeans, intimidates, or threatens that person or group. One closed statement,[2] regardless of length, represents one act of verbal aggression.

Non-verbal aggression is any non-verbal behaviour, excluding physical contact, directed towards self or others that appears intended to demean, intimidate, or threaten that person or group. One closed act,[2] regardless of duration, represents one act of non-verbal aggression.

Physical aggression is touching others, either with parts of the body or equipment in a way that appears to demean, intimidate, threaten, or harm a person. One closed act,[2] regardless of its duration or the severity of its effects, represents one act of physical aggression.

Pro-social behaviour is any act, whether verbal or non-verbal, that is specifically directed towards others and appears to have been meant to enhance in some way the physical, psychological, or social well-being of that person or group. One closed act,[2] represents one act of pro-social behaviour.

Hockey

An analysis of the variance results for each of the summary variables[2] at each of the observation periods is provided in Appendix E (tables E6.1 through E6.8) followed in each case by a table indicating the mean values for each treatment condition within each age group. A further table (E6.9) provides correlations among the summary variables and the television self-selection variable.

The analysis of variance tables are to be read as follows: The column farthest to the left of the table indicates to which of the four observation periods the analysis applies. Pre-treatment observations were made after the assignment of teams to treatment conditions but before any experimental television inputs were provided. Mid-treatment I observations were made the day following the first experimentally provided input, and mid-treatment II observations were made the day of the second experimental input. Post-treatment observations were made on the final day of the hockey-school week, the day following the second experimental input. The remaining columns indicate the analysis of variance F-ratios and the levels of significance for each of these ratios. Analyses for each variable are by three age levels and three treatment conditions. Those findings that reach the traditionally accepted levels of significance are noted with an asterisk.

Tables of means provide summaries of the raw data upon which the analyses were carried out. The average number of occurrences for each age/treatment combination, as well as over-all age and treatment means, are indicated. Since some variation occurred in the number of players and the observation time in the

age/treatment combinations, the raw values were corrected according to the following formula:

$$\text{Mean value} = \frac{\text{number of occurrences of behaviour}}{\text{number of players} \times \text{number of minutes}} \times 100$$

This manipulation served to make the data comparable across age and treatment conditions.

Two relationships stand out for the hockey teams in the post-treatment analyses, those involving pro-social behaviour and verbal aggression (see Table E6.1). In both cases, the direction of the results indicates that exposure to relatively more pro-social media inputs is related to increased levels of the behaviour in question. Teams that were exposed to pro-social presentations were significantly more verbally aggressive and also more pro-social than were the teams receiving anti-social inputs. This conclusion is supported by the finding that in the self-selected media inputs, teams that viewed relatively non-aggressive program contents also showed higher levels of these two categories of behaviour. It is important to keep in mind the fact that self-selected input is independent of the experimentally provided media inputs. It indicates that, regardless of the assignment of the team to experimental input groups, those teams whose viewing habits were relatively less anti-social showed more pro-social and verbally aggressive behaviour. It should also be noted that a substantial portion of the variability among teams is accounted for by the media inputs. In the case of experimentally provided inputs, more than 60 per cent of the variability in both classes of behaviour is directly related to the media input (Table E6.1).

Age does not appear to be an important variable in influencing the level of the observed behaviours among these players. An exception to this occurs during the mid-treatment II observation of pro-social behaviour. Here the youngest group shows the highest level and the oldest group the lowest level of the behaviour. This order is consistent across all the observational periods, but reaches a conventionally accepted level of significance only during the mid-treatment II observation.

A relationship between physically aggressive behaviour and anti-social media input is rather conspicuous by its absence. Teams whose at-home viewing preferences tend towards more anti-social programs tend to be more physically aggressive. This result, however, is in contrast to the finding for experimentally provided inputs, where the teams given anti-social input were the least physically aggressive (Table E6.1) during the post-treatment observation. The only time during which the anti-social treatment teams showed the highest level of physical aggression was before any experimental media input was provided. The relationships for both types of media input are rather weak and probably not deserving of substantial attention.

Lacrosse

Data for the lacrosse teams are presented in Appendix E (in tables E6.11 through E6.20). The tables may be read in essentially the same way as were the hockey data, with one exception. Analysis of variance summary tables indicate differences due to age group, treatment group, and the interaction between age and treatment.

Observations on the lacrosse teams were carried out during three observational periods. Pre-treatment observations were made before any experimental media within the week of each of the media inputs, and post-treatment observations were made during the week following the media presentations and again two weeks later. The intervals between the media presentations and the observations of behaviour were, thus, considerably longer than were the intervals for the hockey groups.

Among the lacrosse teams the experimentally provided media inputs show no strong relationships to the observed behaviours. The effect of the experimentally provided media may have been diluted over this period of time. There appears a trend towards the pro-social treatment groups' showing more pro-social behaviour than the anti-social treatment groups at all age levels during the final observation period. In light of the hockey data reported above, this trend is worth noting.

Self-selected television does show some interesting relationships. As indicated in Table E6.1, some sizeable correlations exist. Consistent with the data from the hockey groups, lacrosse teams who select relatively non-aggressive programs show higher levels of pro-social behaviour than do teams who select relatively aggressive programs. Also consistent with the data from the hockey groups, non-verbal aggression is higher among those who select relatively non-aggressive programs.

It is somewhat surprising to find that physical aggression is negatively related to the aggressiveness of self-selected programs. Although the correlation is not extremely large, it is opposite in direction to that usually expected. This particular relationship is of interest in light of the findings for the baseball teams reported below, which show the same direction of relationship.

The correlation between verbal aggression and the aggressiveness of television programs selected is the highest to appear among the lacrosse teams. Nearly half the variability among the teams on this measure can be explained by this relationship.

On two of the measures obtained, age is seen to be a significant variable. The three age groups differed significantly in levels of physical aggression during both the pre-treatment observation and the mid-treatment observation. The age effect is no longer significant during the post-treatment observation, but as in the earlier observations, the youngest group shows the lowest level of the behaviour and the oldest group the highest level. The age effect on the measure of non-verbal aggression approaches but does not quite reach

statistical significance at both the mid-treatment and the post-treatment observational sessions. Here, however, the order of means is not consistent across the two observations, with the youngest group showing the lowest level of the behaviour at mid-treatment and the highest level at post-treatment.

Baseball

Results for the baseball teams stand in some contrast to those for the other groups. Analyses of variance summaries, means, and correlational relationships are provided in Appendix E in tables E6.21 through E6.29. Observations were made according to essentially the same schedule as were the observations on the lacrosse teams. Pre-treatment observations were made during the week preceding the experimental media input, mid-treatment observations were made within the week of the media inputs, and post-treatment observations were made during the week following the media presentations.

On the measure of physical aggression, treatment effects are non-significant at both the mid-treatment and post-treatment observations. This is noteworthy, since prior to any experimentally provided media input, those teams assigned to the anti-social group had shown higher levels of physical aggression than had the other groups. The effect of the anti-social treatment then appears to have been to reduce the level of physical aggression in the group rather than to accentuate it. Such an interpretation would be consistent with the correlational relationships where higher levels of physical aggression are found among those who select relatively non-aggressive programs as opposed to aggressive programs.

Non-verbal aggression is the only dependent variable that shows a significant treatment effect. It is, however, the pro-social treatment teams that engage in the highest levels of non-verbal aggression during the final observation period.

Unlike the lacrosse and hockey groups, pro-social behaviour for baseball teams is positively related to the self-selection of more aggressive television programs, instead of more non-aggressive programs. Among the treatment groups there is the suggestion of an age-by-treatment interaction. Among the older groups, those exposed to the pro-social media presentations tend to increase their level of pro-social behaviour over those exposed to the anti-social media presentations during the final observation period.

Age effects appear rather consistently throughout the baseball data. The younger group exhibits the higher level of physical aggression while the older group shows higher levels of verbal and non-verbal aggression and pro-social behaviour. One interesting age-by-treatment interaction emerges on the verbal aggression measure. Among the younger children, those exposed to the anti-social media presentation show a higher level of verbal aggression, while among the older groups, those exposed to the pro-social media presentation show the higher level.

Chapter Seven

Summary, Conclusions, and Recommendations

Summary

In general, a strong to very strong relationship did appear between exposure to pro-social media and high levels of pro-social behaviour. Baseball players were the only group among whom this relationship did not appear. Symbolic aggression (non-verbal and verbal aggression) also tended to be higher among those groups whose viewing was relatively pro-social.

Our findings also suggest that exposure to anti-social media does not necessarily lead to increased levels of aggressive behaviour among children and youth participants in organized sports, at least after delays of one to seven days. Neither the experimentally provided anti-social media inputs nor the aggressiveness of programs watched by the children at home show strong and consistent relationships with aggressive behaviour on the playing-field.

The viewing habits of children and youth involved in this study indicate that they prefer to watch sports/athletics, situation comedies, and cartoons rather than mystery, adventure, or dramatic programs. Among the most commonly televised sports/athletics activities, hockey ranks a very strong first, with baseball coming in a rather distant second. Interestingly, these preferences were reflected across the lacrosse and baseball groups as well as the hockey groups. Among occasionally televised events, subjects showed some preference for boxing, car-racing, and track and field.

The number of hours spent viewing television shows a wide diversity across individuals, with some watching as few as ten hours and others as many as 50 hours per week. There is little difference between the winter and summer months in the concentration of viewing. There is, however, a heavy concentration of viewing in the evening as opposed to the morning and afternoon. Considerably more than half of the time spent watching television is during the evening hours. Morning is slightly more preferred than afternoon for watching, except among the baseball players.

Perception of violence was not markedly changed as a result of pro-social exposure. A very slight tendency towards the perception of more violence among the anti-social exposure groups and towards the perception of less violence among the pro-social groups appeared.

Conclusions

On the basis of our results, we are led to the conclusion that exposure to pro-social programming has a greater effect on the behaviour of children and youth than does exposure to anti-social programming. Several cautions are in order, however, in interpreting the results. Our data clearly indicate that we are dealing with two rather different populations. Baseball teams showed quite different patterns on both the written opinionnaire portions of the study and in their actual behaviour on the playing-field than did the hockey and lacrosse players, who were relatively similar to each other. The patterns of relationships were in some cases diametrically opposed in the two groups. In the context of the present study, it was not possible to examine why children and youth elect to play one sport rather than another, but the characteristics involved in the selection are very likely to interact with media exposure. Hockey and lacrosse are generally, and justifiably, considered to be more aggressive sports than is baseball. The former include a good deal of physical contact while in the latter physical contact is minimal. Children electing to play hockey or lacrosse may well be more aggressive to begin with than are children electing to play baseball. These individual factors are likely to influence the reaction to viewing both anti-social and pro-social presentations.

A second unknown in this study is whether children/youth who do not participate in organized sports are systematically different from those who do. A control group of non-participants was not included and, therefore, our findings apply only to those who engage in organized team sports.

Regarding the issue of desensitization to violence as a result of observation of anti-social media presentations, our results do not provide conclusive answers. The indication from the binocular-rivalry data would suggest that within the concept of pictorial input, exposure to anti-social media input tends to sensitize rather than desensitize viewers. Those players exposed

to the anti-social inputs had a slight tendency to see more aggression than did those who had been exposed to pro-social inputs. The trends observed were not statistically reliable. It should be noted that these findings do not necessarily indicate that the same sensitization would be present in the observations of an actual aggressive act.

The written opinionnaire shows the following trends:

1. Television-viewing (particularly of sports) occupies a large portion of the life of children/youth.

2. Of the sports programs shown regularly on television, those generally classified as aggressive athletic activities (such as hockey) are viewed most consistently. Similarly, of the occasional sports programs shown, boxing ranks first but is partially balanced by track and field, which is non-aggressive and is almost equally popular. It should be noted that the number of hours devoted to sports/athletics is biased towards very aggressive and aggressive programs.

3. From among the non-sports/athletics viewed, children/youth appear to select cartoons and comedy over mystery, adventure, and drama.

4. In terms of their general attitude towards sports/athletics, the children/youth showed a dichotomy, with boys and girls involved in baseball expressing values identified with the true amateur sports model and those involved in lacrosse and hockey expressing values identified with the professional athletics model and orientation. The implications for media, as suggested above, are that, as a result of this identification with the values of professional athletics, lacrosse and hockey players are likely to model the behaviours portrayed by professional athletes.

5. Among the programs listed by the players/competitors, the proportion of very non-aggressive and non-aggressive programs outweighed the aggressive and very aggressive programs.

Recommendations

Our recommendations regarding the interface of television and sports/athletics fall into two general classifications: those involving directions for future research in this area and those suggesting policy for media.

Future Research

While most research reports conclude with a call for further research to clarify cloudy issues, the present paucity of research in the sports/athletics and media area make it incumbent upon the principal investigators to stress the need for the accumulation of a solid data base on both participation in and viewing of sports/athletics. This is especially important because of the role of sports in child development and socialization . Further, a review of the general study/research in the area of the effects of television-viewing upon children/youth and

their subsequent behaviour reveals a lack of integration of laboratory research and field studies as well as discrepancies between results emanating from field studies and laboratory research. In view of this fact the laboratory/field approach to study in this area would appear to be the most reasonable. It provides a near optimum balance between control of the variables under study and a realistic setting in which to observe their relationships. The natural controls that sports/athletics games/contests provide – such as precise timing, restrictions on the space for both players and spectators, easy identification of the players/competitors as subjects, or even the allegiance of fans – are an excellent laboratory/field research setting.

Future studies should include an examination of whether there are sex differences in the relationship between media and behaviour in sports/athletics. In order to accomplish this, female sports/athletics groups that are at the same level of organization as the corresponding male groups, or groups that are highly integrated, should be sought for study.

Longer-term follow-up studies are needed to determine the extended consequences of exposure to anti-social and pro-social media. In the present study it was possible to examine the intermediate-term effects of relatively concentrated exposure. Had the media exposure been extended and/or had subjects been observed for longer periods of time, different patterns of results might have emerged.

While the present study attempted to involve a fairly broad age range, the majority of participants were aged seven to 15 years. More extensive study of older individuals, particularly youths aged 15 to 25, would be desirable.

Media Policy

On the basis of the results of the present study the following recommendations are made:

l. Pro-social presentations are recommended. The present emphasis in televised sports/athletics tends very much towards professional team athletic events. These events generally emphasize winning as the major goal, and, occasionally, winning at all costs. In light of the present results, we recommend increased coverage of sports events in which goals such as playing for fun and recreation are emphasized. Increased coverage of school and other amateur sports would serve a purpose. Increased coverage of sports/athletics events in which pro-social behaviour is common and a matter of custom, for example, golf and tennis, would also be desirable.

2. Along the same lines, it would be possible to provide increased pro-social input in activities that by their nature or in practice do not generally provide pro-social models. The introduction of "cameo" features in which the participants in an athletic event being televised are shown engaging in pro-social activities is possible and

desirable. This serves the function of providing positive role-models for viewers even though the individuals depicted might not be shown as highly pro-social during the normal course of the telecast. Examples of such cameo presentations exist on American television where the American National Football League has shown professional players engaging in voluntary helping activities.

3. We have no empirical basis for recommending changes in current programming aside from suggestions for the inclusion of more pro-social content. Our subjects' viewing preferences include programs that depict less explicit and realistic violence overall than do the non-preferred programs.

4. A concerted effort should be made to locate extant pro-social audio-visual sources to be used by public media and/or all levels of sports/athletics organizations.

5. Research commissioned and conducted by the television industry, as well as government commissions on the Canadian-American scene, show the high level of concern regarding the actual and potential effects of television upon North American children/youth. We strongly recommend an investment of energy and resources to encourage mass media to depict and emphasize the pro-social model and the positive behavioural aspects of sports through such activities as televising more amateur/school sports activities, and/or utilizing local press, radio, and television to convey the distinction in goals, methods, and means between amateur sports and professional athletics. Mass media and television in particular could provide a vehicle by which appropriate pro-social role-models could be provided for the large number of citizens involved in youth sports activities. In addition to providing input on teaching technical skills, a strong emphasis should be placed on the physiological, psychological, sociological, and general educational needs of children/youth involved in sports activities.

Endnotes

Chapter One

1 See William R. McMurtry, *Investigation and Inquiry into Violence in Amateur Hockey: Report to the Ontario Minister of Community and Social Services* (Toronto: Ministry of Community and Social Services, 1974). See also John McMurtry, "Sport or Athletics: A Conceptual Analysis", and Bernie Parish, "They Call it a Game", in *Sport or Athletics: A North American Dilemma* (edited by J. Alex Murray). Proceedings of the 15th Annual Canadian-American Seminar (Windsor, Ont.: Canadian-American Seminar, 1973).

2 Statement by Ralph Melanby to Dick Moriarty in a telephone interview and to Attorney General Roy McMurtry as quoted on CBC-TV National News and in *The Globe and Mail*, March 1976.

3 See Acknowledgements and accompanying list of Research Project Members for sources utilized for pro- and anti-social treatment.

4 See Charles K. Atkin and Bradley S. Greenberg, "Family, Child and Message Factors Mediating Children's Pro-Social Learning from Television", *Proceedings of the Symposium on Perspectives on the Influence of Television on the Development of Children*, Annual Convention of the American Educational Research Association, held at San Francisco, April 1976.

5 See *Report of the National Commission on the Cause and Prevention of Violence*, Milton S. Eisenhower, Chairman, (Washington, D.C.: U.S. Government Printing Office 1969); and *Television and Growing Up: The Impact of Televised Violence*, Report to the Surgeon General (Washington, D.C.: U.S. Printing Office, 1972). See also the annotated bibliography appended to this report, which was compiled using a manual computer-retrieval system by the SIR/CAR Task Force on Research and Development working in cooperation with the Education Research Information Centre (ERIC) of the University of Oregon, and the Lockheed Interspace Retrieval System (LIRS).

6 Monroe M. Lefkowitz, Leopold O. Walder, Leonard D. Eron, and L. Rowell Huesmann. "Preference for Televised Contact Sports as Related to Sex Differences in Aggression", *Developmental Psychology*, 9:3, (1973), pp.417-20.

7 See also Timothy T. Craigs, ed., *Humanistic and Mental Health Aspects of Sport, Exercise and Recreation* (Washington, D.C.: The American Medical Association, 1976).

8 See Colleen Valcke, "Media Content Analysis Trends of Televised Sport/Athletics, 1961-1976", Class Project for Dick Moriarty and James Duthie, University of Windsor, in Course 459c, Aggression and Violence in Sport/Athletics, Fall 1976 (available from SIR/CAR).

9 Sidney Siegel, *Non-Parametric Statistics for the Behavioural Sciences* (Toronto: McGraw-Hill, 1956), pp. 202-38.

Chapter Two

1 See Ann Marie Guilmette, Dick Moriarty, and Megid Ragab, "A Strategy for Changing Organizations: A Case Study of Little League Baseball,"*Journal of Physical Education and Recreation* (forthcoming); abstracted and reprinted from Megid Ragab and Dick Moriarty, "A Strategy for Changing Organizations"; and Ann Marie Guilmette and Dick Moriarty, "Windsor District 5 Little League Baseball," in *Proceedings of the Canadian Association of Administrative*

Sciences (Quebec City, Quebec: Université Laval, June 2, 1976). See also Ann Marie Guilmette and Dick Moriarty, "Crisis in Amateur Sports Organizations Viewed by Change Agent Research", *Proceedings of the International Congress of Physical Activity Sciences* (July 12, 1976), Quebec City, Quebec.

2 Richard Goranson, "Television Violence Effects: Issues and Evidence," in Ontario, The Royal Commission on Violence in the Communications Industry, *Report*. Vol. 5. *Learning From the Media* (Toronto, 1977).

3 See Paul Ekman and Wallace B. Friesen, *Unmasking the Face* (Englewood Cliffs, New Jersey: Prentice-Hall, 1975).

4 This methodology has been used extensively on SIR/CAR studies and for monitoring the behaviour of both participants and spectators at sports/athletics events.

5 A number of videotapes became available after the study was completed. These tapes are available to other investigators from SIR/CAR. A list is provided in Appendix A.

Chapter Three

1 See Charles K. Atkin and Bradley S. Greenberg,"Family, Child and Message Factors Mediating Children's Pro-Social Learning from Television", paper and *Proceedings of the Symposium on Perspectives on the Influence of Television on the Development of Children*, Annual Convention of the American Educational Research Association, held at San Francisco, April 1976.

2 Mike Frisby, a Faculty of Business Administration Honours graduate, was chosen to interact with Little League Baseball; Cheryl Brown, a Faculty of Human Kinetics Honours student, was chosen to communicate with the St. Clair Summer Hockey School; and Patti Jones, a Faculty of Human Kinetics Honours student was chosen to act as liaison person with the Windsor Minor Lacrosse Association.

3 See Dick Moriarty and Marge Holman Prpich, "Chatham Summer Basketball League Viewed by Change Agent Research", Catalogue of Current Ontario University Recreation and Leisure Research, in *Research and Education*, January 1977.

4 See Charles R. Corder-Bolz, "Television Content and Children's Social Attitudes," *Progress Report to the Office of Child Development*, DHEW (Austin, Texas: Southwest Educational Development Laboratory, 1976).

5 It would seem that the children/youth involved in sports have different viewing preferences from children/youth not involved in sports or athletics participation. Compare Gregory Fouts, "The Effect of Television on Children and Youth: A Developmental Approach," in Ontario, The Royal Commission on Violence in the Communications Industry, *Report*. Vol. 6. *Vulnerability to Media Effects* (Toronto, 1977) .

Chapter Four

1 See Paul Ekman, "Universal Facial Expressions of Emotion," *California Mental Health Research Digest*, 8: 4 (Autumn, l970), pp, 151-58.

2 See Paul Ekman and Wallace V. Friesen, *Unmasking the Face* (Englewood Cliffs, New Jersey: Prentice-Hall, 1975).

3 Paul Ekman, et al, "Facial Expressions of Emotion While Watching Televised Violence as Predictives of Subsequent Aggression," reproduced from *Television's Effects: Further*

Explorations, Television and Social Behavior, vol. V, A Technical Report to the Surgeon General's Scientific Advisory Committee in Television and Social Behavior (Washington, D.C.: U.S. Government Printing Office, 1972).

Chapter Five

1 Ann Marie Guilmette, "Identification of Class Differences as Determinants of the Perception of Hostile or Non-Hostile Athletic Stimuli," Master's thesis, University of Windsor, 1974.

Chapter Six

1 The proportion of variance accounted for by the analysis of variance was calculated according to the method described by William L. Hays, in *Statistics for the Social Sciences*, 2nd ed. (New York: Holt, Rinehart and Winston, 1973).

2 The concept of a closed act or statement means that the act or statement in itself can fulfil what appears to be its intended purpose. Repeating the same statement, "Let's go, team" over and over again without pausing should represent only one act of pro-social behaviour. On the other hand, the statement "Let's go, team" followed by a pause and then another statement "You're playing well, team" represents two acts of pro-social behaviour.

3 The original data obtained contained observations that were classified by mode (with body, with implement), intensity (soft, medium, hard), and recipient (teammates, opponents, coach, official) of the aggressive or pro-social act. Examples of the raw data sheets are provided. For convenience in analysis, data were summed over the appropriate categories to arrive at the summary variables. Coaches' behaviour was not included in any of the summary variables.

Appendix A: Research and Development Audio-Visual Chart for Pro-Social, Anti-Social, and Control Television-Viewing Tapes

Representative of Pro-Social Behaviour	Representative of Anti-Social Behaviour

Hockey

1957 Stanley Cup (30 min., 16 mm, and videotape) New York versus Montreal	1956 Stanley Cup (30 min., 16 mm, and videotape) Montreal versus Detroit
1966 Stanley Cup, Cut #I (25 min., 16 mm, and videotape) Toronto versus Montreal	1959 Stanley Cup (25 min., 16 mm, and videotape) Montreal versus Toronto
1968 Stanley Cup, Cut #I (25 min., 16 mm, and videotape) St. Louis versus Montreal	1967 Stanley Cup, Cut #II (25 min., 16 mm, and videotape) Montreal versus St. Louis
1970 Stanley Cup (30 min., 16 mm, and videotape) Boston versus St. Louis	1969 Stanley Cup, Cut #II (25 min., 16 mm, and videotape) Montreal versus St. Louis
1971 Stanley Cup (30 min., 16 mm, and videotape) Montreal versus Chicago	1973 Stanley Cup (30 min., 16 mm, and videotape) Boston versus Montreal
1975 Stanley Cup (25 min., 16 mm, and videotape) Philadelphia versus Boston	1976 USSR Red Army versus NHL Philadephia Flyers (55 min., videotape)
1976 NHL Montreal versus Vancouver Canucks (55 min., videotape)	1976 NHL Philadelphia versus Montreal (60 min., videotape)

Control

CCM Instructional Hockey, (40 min., 16 mm, and videotape)

Lacrosse

Lacrosse, Cut #1—*The Fastest Game on 2 Feet* (14 min., 16 mm, and videotape)	Minto Cup Lacrosse (28 min., videotape) Mississauga versus Burnaby
Lacrosse, Cut #2—*Lacrosse Is Everybody's Game* 16 mm, and videotape)	Mann Cup Lacrosse, Part II (12 min., videotape) Vancouver versus Peterborough
Mann Cup Lacrosse, Part I (60 min., videotape) Vancouver versus Peterborough	

Control

Skill Films, Level I
Lacrosse
(20 min., 16 mm, and videotape)

Baseball

1970 All Star Game (27 min., 16 mm, and videotape) National League versus American	1969 World Series (40 min., 16 mm, and videotape New York Mets versus Baltimore

1974 World Series (27 min., 16 mm, and videotape) Los Angeles versus Oakland	1970 World Series (30 min., 16 mm, and videotape) Cincinnati versus Baltimore
1975 World Series (37 min., 16 mm, and videotape) Cincinnati versus Boston	1972 World Series (40 min., 16 mm, and videotape) Cincinnati versus Oakland

Control

All the Self There Is
E.R. Moore Co.
(13 min., videotape)

Every Child a Winner
State Department of Education, Georgia
(13 min., 16 mm, and videotape)

Basketball

Basketball Today
(29 min., 16 mm, and videotape)

Appendix B
Group-Observation Sheet

Date:_____Time:_____Name of film:_____

Place:_____Film:_____Social players and sport:_____

Number Reading on Tape	Group Number in Group	Time	☺	😐	☹	Vocal behaviour +	−
		0 min.					
		3 min.					
		6 min.					
		9 min.					
		12 min.					
		15 min.					
		18 min.					
		21 min.					
		24 min.					
		27 min.					
		30 min.					
		33 min.					
		36 min.					
		39 min.					
		42 min.					
		45 min.					
Totals							

Appendix C—Data-Recording Sheet—Binocular Rivalry

Key:

$\sqrt{}$ = hostile response
X = non-hostile response

Team	Shirt num-ber	Age	Eye domi-nance	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Appendix D

Raw-Data Sheet
Lacrosse and Hockey

Referee	S	N	F
Coach	S	N	F
Team	–	–	–

Observer: League: Date:
Team: Opposition: Location:
Period   1   2   3   Sport: Score:

Physical Aggression

	Soft	Medium	Hard
Stick—stick	12-13	14-15	16-17
Stick - body	18-19	20-21	22-23
Body—body	24-25	26-27	28-29

Verbal and Non-Verbal Aggression

		Referee	Coach	Teammates	Opponents	Self
VA	Player	30	31	32	33	34
	Coach	35	36	37	38	39
NVA	Player	40	41	42	43	44
	Coach	45	46	47	48	49

Pro-Social Behaviour

		Teammates	Opponents
V	Player	50	51
	Coach	52	53
NV	Player	54	55
	Coach	56	57

Raw Data Sheet for Baseball

Name: League: Date:
Opposition: Team:
Inning: Location:

		Referee	Coach	Teammates	Opponents	Self
VA	Player					
	Coach					
NVA	Player					
	Coach					

		Teammates	Opponents
V	Players		
	Coach		
Pro-social			
NV	Players		
	Coach		

	Soft	Medium	Hard
Equipment–Body			
P.A. Body body			

Appendix E/Tables

Table E6.1a

Summary of Analyses of Variance on Physical Aggression for Hockey Teams

	Source of variation	F* ratio	Probability† level
Pre-treatment	age	1.03	>.20
	treatment	1.94	>.20
Mid-treatment I	age	2.09	>.20
	treatment	3.52	>.10
Mid-treatment II	age	2.96	>.10
	treatment	3.28	>.10
Post-treatment	age	.09	>.20
	treatment	1.41	>.20

*F Ratios are ratios of the variability between groups divided by the variability within groups. The higher the value indicated the more the treatment groups differed from one another.

†Probability level indicates how frequently one would expect to obtain differences as large or larger than this due to chance variation. For example, <.20 indicates that due chance alone would expect differences this large more than 20 times out of 100.

Table E6.2

Mean Values for Age and Treatment Conditions (Media Input), Physical Aggression – Hockey*

Pre-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	8.05	6.75	7.02	7.27
Middle (10-13)	2.80	13.52	3.20	6.51
Older (14-17)	2.24	6.29	2.31	3.61
Col. mean	4.36	8.85	4.18	

Mid-treatment I

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	48.99	59.00	17.68	41.89
Middle (10-13)	53.90	20.30	5.72	26.64
Older (14-17)	18.49	26.01	10.40	18.30
Col. mean	40.46	35.10	11.27	

Mid-treatment II

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	29.04	34.77	30.60	31.47
Middle (10-13)	43.26	31.68	18.81	31.25
Older (14-17)	25.41	25.20	3.64	18.08
Col. mean	32.57	30.55	17.68	

Post-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	57.04	73.59	58.00	62.88
Middle (10-13)	42.60	43.25	84.00	56.62
Older (14-17)	65.50	36.12	83.88	61.83
Col. mean	55.05	50.99		

*Since some variation occurred in the number of players and the observation time in the age/treatment combinations, the raw values were corrected according to the formula:

$$\text{mean value} = \frac{\text{number of occurrences of behaviour}}{\text{number of players} \times \text{number of minutes}} \times 100$$

Table E6.3

Summary of Analyses of Variance on Non-Verbal Aggression for Hockey Teams

	Source of variation	F ratio	Probability level
Pre-treatment	age	1.29	>.20
	treatment	.47	>.20
Mid-treatment I	age	.34	>.20
	treatment	1.77	>.20
Mid-treatment II	age	1.36	>.20
	treatment	2.66	>.10
Post-treatment	age	.66	>.20
	treatment	1.54	>.20

Table E6.4

Mean Values for Age and Treatment Conditions, Non-Verbal Aggression – Hockey

Pre-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	.70	.90	2.60	1.40
Middle (10-13)	.14	1.04	.10	.43
Older (14-17)	.64	1.02	.44	.70
Col. mean	.49	.99	1.05	

Mid-treatment I

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	4.14	.59	.85	1.86
Middle (10-13)	2.10	.35	1.30	1.25
Older (14-17)	.86	1.02	1.60	1.16
Col. mean	1.08	.64	1.25	

Mid-treatment II

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	1.56	2.28	1.62	1.82
Middle (10-13)	1.25	1.32	.88	1.15
Older (14-17)	1.32	3.84	1.17	2.11
Col. mean	1.38	2.48	1.22	

Post-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	.92	1.32	.80	1.01
Middle (10-13)	1.80	.75	1.05	1.20
Older (14-17)	2.00	.84	1.44	1.43
Col. mean	1.57	.97	1.10	

Table E6.5

Summary of Analyses of Variance on Verbal Aggression for Hockey Teams

	Source of variation	F ratio	Level of significance
Pre-treatment	age	.90	$>.20$
	treatment	1.06	$>.20$
Mid-treatment I	age	1.56	$>.20$
	treatment	.64	$>.20$
Mid-treatment II	age	.36	$>.20$
	treatment	.17	$>.20$
Post-treatment	age	.28	$>.20$
	treatment	8.18	$<.05*$

Table E6.6

Mean Values for Age and Treatment Conditions, Verbal Aggression – Hockey

Pre-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	6.30	–	.13	2.14
Middle (10-13)	.32	.52	.20	.35
Older (14-17)	.16	–	–	.05
Col. mean	2.26	.17	.11	

Mid-treatment I

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	5.52	1.77	.51	2.60
Middle (10-13)	.70	.35	1.04	.70
Older (14-17)	–	1.02	.20	.41
Col. mean	2.07	1.05	.58	

Mid-treatment II

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	2.08	.59	.54	1.07
Middle (10-13)	–	.99	.77	.59
Older (14-17)	.33	1.20	.39	.64
Col. mean	.80	.93	.57	

Post-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	2.30	.33	1.60	1.41
Middle (10-13)	3.30	–	.70	1.33
Older (14-17)	1.75	.63	.72	1.03
Col. mean	2.45	.32	1.01	

Table E6.7

Summary of Analyses of Variance on Pro-Social Behaviour for Hockey Teams

	Source of variation	F ratio	Level of significance
Pre-treatment	age	3.65	>.10
	treatment	.77	>.20
Mid-treatment I	age	2.22	>.20
	treatment	1.36	>.20
Mid-treatment II	age	22.39	<.01*
	treatment	2.03	>.20
Post-treatment	age	3.02	>.10
	treatment	11.32	<.025*

Table E6.8

Mean Values for Age and Treatment Conditions, Pro-Social Behaviour – Hockey

Pre-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	1.40	.90	1.43	1.24
Middle (10-13)	.98	1.04	.20	.74
Older (14-17)	.48	.68	.22	.46
Col. mean	.95	.87	.62	

Mid-treatment I

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	6.90	11.21	.51	6.21
Middle (10-13)	4.90	.35	.65	1.97
Older (14-17)	2.15	—	.20	.78
Col. mean	4.65	3.85	.45	

Mid-treatment II

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	9.36	6.27	5.94	7.19
Middle (10-13)	2.10	3.63	.99	2.24
Older (14-17)	1.32	1.44	.13	.96
Col. mean	4.26	3.78	2.35	

Post-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-9)	11.96	8.25	8.40	9.54
Middle (10-13)	12.30	7.25	8.40	9.32
Older (14-17)	11.00	2.10	7.20	6.77
Col. mean	11.75	5.87	8.00	

Table E6.9

Correlations Among Summary Variables at Four Observation Times – Hockey

Pre-treatment

	1	2	3	4	5
1. Television selection	1.00	−.03	.01	.14	−.64
2. Physical aggression		1.00	.45	.27	−.23
3. Non-verbal aggression			1.00	−.08	.02
4. Verbal aggression				1.00	−.01
5. Pro-social					1.00

Mid-treatment I

	1	2	3	4	5
1. Television selection	1.00	−.26	.23	.21	−.21
2. Physical aggression		1.00	.38	.53	.88
3. Non-verbal aggression			1.00	.83	.30
4. Verbal aggression				1.00	.55
5. Pro-social					1.00

Mid-treatment II

	1	2	3	4	5
1. Television selection	1.00	−.72	.25	.36	.05
2. Physical aggression		1.00	.14	−.04	.46
3. Non-verbal aggression			1.00	.29	.06
4. Verbal aggression				1.00	.60
5. Pro-social					1.00

Post-treatment

	1	2	3	4	5
1. Television selection	1.00	.31	−.45	−.39	−.53
2. Physical aggression		1.00	.24	−.26	.17
3. Non-verbal aggression			1.00	.47	.52
4. Verbal aggression				1.00	.73
5. Pro-social					1.00

Table E6.10: *Correlations Among "Raw" Variables—Hockey Groups*

Variable	PA-stick-stick (medium) [2]	PA-stick-stick (hard) [3]	PA-stick-body (soft) [4]	PA-stick-body (medium) [5]	PA-stick-body (hard) [6]	PA-body-body (soft) [7]	PA-body-body (medium) [8]	PA-body-body (hard) [9]	VA-player-referee-coach [10]	VA-player-teammates or opponents [11]	VA-player-self [12]	VA-coach-referee-coach [13]	VA-coach-teammates or opponents [14]	NVA-player-referee-coach [15]	NVA-player-teammates or opponents [16]	NVA-player-self [17]	NVA-coach-referee-coach [18]	NVA-coach-teammates or opponents [19]	VPS-player-teammates or opponents [20]	VPS-coach-teammates or opponents [21]	NVPS-player-teammates or opponents [22]	NVPS-coach-teammates or opponents [23]
PA-stick-stick (soft) [1]	.69	.14	.87	.73	.24	.46	.45	.35	−.03	−.16	.12	−.06	.02	.05	.15	.36	.03	−.07	.31	.15	.52	.13
PA-stick-stick (medium) [2]		.58	.50	.57	.30	.20	.24	.25	.08	−.03	.30	−.05	−.04	.02	.18	.33	−.00	−.09	.70	.08	.80	.01
PA-stick-stick (hard) [3]			.08	.32	.40	−.03	.02	.10	−.02	.06	−.03	−.02	−.02	−.02	.14	.22	−.03	−.05	.57	−.08	.55	−.07
PA-stick-body (soft) [4]				.80	.24	.57	.47	.43	−.09	−.22	.03	.01	.05	.04	.15	.38	.10	.01	.11	.17	.35	.15
PA-stick-body (medium) [5]					.44	.44	.49	.56	−.04	−.14	.05	−.03	.05	.02	.11	.35	.03	−.08	.26	.10	.45	.11
PA-stick-body (hard) [6]						.10	.24	.29	−.05	−.07	.01	−.03	.11	.03	.07	.06	−.06	.02	.33	.03	.44	.04
PA-body-body (soft) [7]							.79	.42	−.04	−.06	.11	.05	−.05	.04	.28	.21	.02	−.04	.17	−.04	.28	−.04
PA-body-body (medium) [8]								.65	.02	.06	.13	−.05	−.01	.00	.27	.10	−.00	−.11	.27	−.06	.33	.03
PA-body-body (hard) [9]									.03	−.07	.01	−.05	−.07	−.03	.04	.06	.02	−.08	.10	.03	.26	.09
VA-player-referee-coach [10]										.22	.13	−.05	.12	.24	.05	.21	−.06	.05	.15	−.01	.13	.26
VA-player-teammates or opponents [11]											.22	−.06	.05	−.05	.09	−.04	−.08	−.14	.26	−.21	.11	−.18
VA-player-self [12]												−.04	−.07	−.03	.04	.06	.02	−.08	.10	.03	−.04	−.02
VA-coach-referee-coach [13]													−.11	.15	.16	−.02	−.01	.00	−.01	.06	−.10	−.05
VA-coach-teammates or opponents [14]														−.03	.12	.06	−.08	.03	−.10	.14	.00	.09
NVA-player-referee-coach [15]															.15	.21	−.08	.03	.06	−.05	.14	.03
NVA-player-teammates or opponents [16]																.34	−.02	−.05	.20	.02	.26	−.03
NVA-player-self [17]																	−.01	.00	−.01	.06	−.04	−.02
NVA-coach-referee-coach [18]																		−.04	.18	.05	.26	−.03
NVA-coach-teammates or opponents [19]																			.15	−.06	−.07	−.00
VPS-player-teammates or opponents [20]																				−.01	−.09	−.06
VPS-coach-teammates or opponents [21]																					.89	.32
NVPS-player-teammates or opponents [22]																						.01

Coefficients attaining absolute values of .17 and larger reach satistical significance at the 5 per cent confidence level.
Values of .22 and larger are significant at the 10 per cent confidence level.

Identification of "Raw" Variables in Table E6.10

Variable
Number

Physical Aggression Measures

1 player's use of stick against stick of another player (soft)

2 player's use of stick against stick of another player (medium)

3 player's use of stick against stick of another player (hard)

4 player's use of stick against body of another player (soft)

5 player's use of stick against body of another player (medium)

6 player's use of stick against body of another player (hard)

7 player's use of body against body of another player (soft)

8 player's use of body against body of another player (medium)

9 player's use of body against body of another player (hard)

Verbal Aggression Measures

10 verbal aggression by player towards official or coach

11 verbal aggression by player towards teammates or opponents

12	verbal aggression by player towards self
13*	verbal aggression by coach towards another coach or official
14*	verbal aggression by coach towards own players or opposing players

Non-Verbal Aggression Measures

15	non-verbal aggression by player towards official or coach
16	non-verbal aggression by player towards teammates or opponents
17	non-verbal aggression by player towards self
18*	non-verbal aggression by coach towards another coach or official
19*	non-verbal aggression by coach towards own players or opposing players

Pro-Social

20	verbal pro-social act by player towards own teammastes or opponents
21*	verbal pro-social act by coach towards own players or opposing players
22	non-verbal pro-social act by player towards teammates or opponents
23*	non-verbal pro-social act by coach towards teammates or opponents

*Items not included in the summary variables.

Table E6.11

Summary of Analyses of Variance on Physical Aggression for Lacrosse Teams

	Source of variation	F ratio	Level of significance
Pre-treatment	age	11.29	<.025*
	treatment	5.85	>.05
	age × treatment	.50	>.20
Mid-treatment	age	70.43	<.005*
	treatment	4.03	>.10
	age × treatment	5.10	>.05
Post-treatment	age	.26	>.20
	treatment	.20	>.20
	age × treatment	2.43	>.20

Table E6.12

Mean Values for Age and Treatment Conditions, Physical Aggression – Lacrosse*

Pre-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (7-10)	29.10	41.40	40.10	36.87
Middle (11-14)	42.59	48.95	–	45.77
Older (15-20)	52.18	54.89	–	53.54
Col. mean	41.29	48.41	40.10	

Mid-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (7-10)	31.10	30.40	28.20	29.90
Middle (11-14)	39.15	35.48	–	37.32
Older (15-20)	40.97	39.38	–	40.18
Col. mean	37.07	35.09	28.20	

Post-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (7-10)	27.35	35.60	32.80	31.92
Middle (11-14)	39.19	30.34	–	34.77
Older (15-20)	32.00	39.95	–	35.98
Col. mean	32.85	35.30	32.80	

*Average number of instances per game period.

Table E6.13

Summary of Analyses of Variance on Non-Verbal Aggression for Lacrosse Teams

	Source of variation	F ratio	Level of significance
Pre-treatment	age	.94	>.20
	treatment	1.96	>.20
	age × treatment	2.39	>.20
Mid-treatment	age	6.52	>.05
	treatment	1.71	>.20
	age × treatment	2.28	>.20
Post-treatment	age	4.96	>.05
	treatment	1.09	>.20
	age × treatment	.81	>.20

Table E6.14

Means Values for Age and Treatment Conditions, Non-Verbal Aggression – Lacrosse

Pre-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (7-10)	.75	.80	.85	.80
Middle (11-14)	.65	1.89	–	1.27
Older (15-20)	1.02	1.07	–	1.05
Col. mean	.81	1.25	.85	

Mid-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (7-10)	1.70	1.35	2.20	1.75
Middle (11-14)	2.93	4.43	–	3.68
Older (15-20)	2.22	3.00	–	2.61
Col. mean	2.28	2.93	2.20	

Post-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (7-10)	3.45	2.40	2.76	2.87
Middle (11-14)	1.82	1.83	–	1.83
Older (15-20)	1.20	1.50	–	1.35
Col. mean	2.16	1.91	2.76	

Table E6.16

Means Values for Age and Treatment Conditions, Verbal Aggression – Lacrosse

Pre-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (7-10)	1.65	.45	1.00	1.03
Middle (11-14)	1.04	1.98	–	1.51
Older (15-20)	3.82	3.51	–	3.67
Col. mean	2.17	1.98	1.00	

Mid-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (7-10)	.80	.30	.60	.57
Middle (11-14)	.33	2.00	–	1.17
Older (15-20)	1.55	4.08	–	2.82
Col. mean	.89	2.13	.60	

Post-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (7-10)	1.05	.45	.65	.72
Middle (11-14)	.85	1.36	–	1.11
Older (15-20)	.85	.70	–	.78
Col. mean	.92	.84	.65	

Table E6.15

Summary of Analyses of Variance on Verbal Aggression for Lacrosse Teams

	Source of variation	F ratio	Level of significance
Pre-treatment	age	2.02	>.20
	treatment	.00	>.20
	age × treatment	.26	>.20
Mid-treatment	age	1.04	>.20
	treatment	.74	>.20
	age × treatment	.36	>.20
Post-treatment	age	.88	>.20
	treatment	.36	>.20
	age × treatment	.53	>.20

Table E6.17

Summary of Analyses of Variance on Pro-Social Behaviour for Lacrosse Teams

	Source of variation	F ratio	Level of significance
Pre-treatment	age	.18	>.20
	treatment	.43	>.20
	age × treatment	3.84	>.10
Mid-treatment	age	.06	>.20
	treatment	.21	>.20
	age × treatment	.25	>.20
Post-treatment	age	.20	>.20
	treatment	.15	>.20
	age × treatment	.12	>.20

Table E6.18

Means Values for Age and Treatment Conditions,
Pro-Social Behaviour – Lacrosse

Pre-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (7-10)	9.60	2.40	3.50	5.17
Middle (11-14)	4.79	8.27	–	6.53
Older (15-20)	7.28	6.95	–	7.12
Col. mean	7.22	5.87	3.50	

Mid-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (7-10)	5.80	4.45	3.30	4.52
Middle (11-14)	4.00	4.65	–	4.33
Older (15-20)	3.57	6.90	–	5.24
Col. mean	4.46	5.33	3.30	

Post-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (7-10)	3.85	1.95	5.60	3.80
Middle (11-14)	5.23	4.90	–	5.07
Older (15-20)	7.00	3.95	–	5.48
Col. mean	5.36	3.60	5.60	

Table E6.19

Correlations Among Summary Variables at Three
Observation Times – Lacrosse

Pre-treatment

	1	2	3	4	5
1. Television selection	1.00	.33	.46	.38	.58
2. Physical aggression		1.00	.36	.67	.56
3. Non-verbal aggression			1.00	.28	.36
4. Verbal aggression				1.00	.50
5. Pro-social					1.00

Mid-treatment

	1	2	3	4	5
1. Television selection	1.00	−.10	.28	.20	.30
2. Physical aggression		1.00	.26	.34	.05
3. Non-verbal aggression			1.00	.22	.00
4. Verbal aggression				1.00	.86
5. Pro-social					1.00

Post-treatment

	1	2	3	4	5
1. Television selection	1.00	−.28	−.42	.68	.44
2. Physical aggression		1.00	−.26	−.11	.28
3. Non-verbal aggression			1.00	−.24	.03
4. Verbal aggression				1.00	.30
5. Pro-social					1.00

Table E6.20: *Correlations Among "Raw" Variables—Lacrosse Group*

Variable legend (column numbers):

1. PA-stick (soft)
2. PA-stick (med.)
3. PA-stick (hard)
4. PA-stick-body (soft)
5. PA-stick-body (med.)
6. PA-stick-body (hard)
7. PA-body-body (soft)
8. PA-body-body (med.)
9. PA-body-body (hard)
10. VA-player-player
11. VA-player
12. VA-player-teammates
13. VA-player-opponents
14. VA-player-self
15. VA-coach-referee
16. VA-coach-coach
17. VA-coach-teammates
18. VA-coach-opponents
19. VA-coach-self
20. NVA-player-referee
21. NVA-player-coach
22. NVA-player-teammates
23. NVA-player-opponents
24. NVA-player-self
25. NVA-coach-referee
26. NVA-coach-coach
27. NVA-coach-teammates
28. NVA-coach-opponents
29. NVA-coach-self
30. VPS-player-teammates
31. VPS-player-opponents
32. VPS-coach-teammates
33. VPS-coach-opponents
34. NVPS-player-teammates
35. NVPS-player-opponents
36. NVPS-coach-teammates
37. NVPS-coach-opponents

Var	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
1	.25	.04	.35	.24	−.04	.31	−.01	−.03	.003	−.05	.15	.17	−.03	.11	−	−.04	−.01	.01	.02	−	.04	.11	.03	−.05	−	−.07	−	.00	.14	.11	.05	.10	.16	.15	.01	−
2		.24	.03	.43	.17	.12	.25	.13	.14	−.02	.17	.16	−.02	.11	−	.14	.17	.02	.10	−	−.06	.01	.05	.03	−	−.00	−	−.04	.18	.09	.26	.11	.23	.11	.19	−
3			−.09	.24	.27	−.01	.11	.13	.01	.06	−.00	.02	.02	.04	−	.16	−.02	−.04	−.04	−	−.10	−.12	−.05	.03	−	−.04	−	−.01	.02	−.02	.19	−.06	.07	.01	.19	−
4				.16	−.13	.28	.03	−.11	−.04	−.03	.08	.19	−.04	.04	−	−.06	.01	.06	.07	−	.05	.36	−.04	−.03	−	−.07	−	.02	.12	−.02	−.00	.10	.04	−.01	−.01	−
5					.40	.21	.29	.27	.11	.01	.09	.29	.10	.12	−	.22	.01	−.03	.01	−	−.06	−.05	.03	.03	−	.10	−	−.02	.16	.03	.27	.09	.17	−.03	.22	−
6						−.03	.13	.20	.08	.04	.04	.12	.002	−.03	−	.10	−.03	−.06	−.00	−	−.05	−.18	.05	.04	−	.01	−	−.06	.12	−.05	.13	−.06	−.03	−.04	.09	−
7							.09	−.03	.02	−.01	.13	.16	.04	.06	−	−.08	.05	.04	.14	−	.02	.05	.04	−.05	−	−.07	−	.10	.13	−.01	−.02	−.03	.13	.01	−.04	−
8								.16	.06	.13	.01	.02	.02	.04	−	.22	.11	.07	−.05	−	−.06	−.02	−.08	.21	−	−.06	−	.04	.05	.03	.22	−.03	.18	−.03	.26	−
9									.13	−.04	.01	.07	−.03	−.06	−	.10	−.02	−.03	−.00	−	.02	−.02	.11	−.03	−	−.03	−	−.03	.06	−.00	.10	−.04	.13	−.08	.10	−
10										.25	.05	.15	.02	.08	−	.13	.08	−.01	.32	−	−.05	−.07	−.03	.30	−	.07	−	−.02	.01	.23	.07	−.02	.02	−.04	.13	−
11											−.04	−.01	−.02	−.01	−	.33	.13	−.01	−.01	−	.09	.02	.07	.81	−	−.01	−	−.01	−.05	−.01	.13	−.01	−.06	−.02	.39	−
12												.33	.11	.06	−	−.01	−.03	−.03	.09	−	.05	.06	.19	−.04	−	−.03	−	−.04	.40	.22	.04	.02	.21	.04	.03	−
13													.04	.09	−	.03	−.04	−.04	.12	−	.01	.12	.01	−.04	−	−.04	−	−.05	.47	.25	.11	.08	.19	−.01	−.00	−
14														−.03	−	.03	.01	−.01	−.03	−	−.01	.01	.09	−.02	−	.19	−	−.02	.10	.01	.03	−.02	.07	.02	−.05	−
15															−	.15	.27	.27	.47	−	.08	−.05	−.05	.06	−	−.01	−	−.01	.00	.03	.29	.47	.02	−.03	.17	−
16																−	−			−			−		−		−						−		−	−
17																	.24	−.01	−.03	−	−.04	−.09	−.01	.39	−	.34	−	−.02	−.04	.01	.73	.06	.03	−.02	.63	−
18																		.86	.08	−	.14	.07	−.04	.37	−	.17	−	−.01	−.07	−.02	.28	−.01	.05	−.02	.16	−
19																			−.01	−	.19	.10	−.03	.24	−	−.00	−	−.01	−.06	−.01	.03	−.01	.03	−.01	−.01	−
20																				−	−.04	−.00	0.0	−.01	−	−.01	−	−.01	.08	.10	.01	.32	.08	−.03	−.03	−
21																					−	−	−		−		−				−			−		−
22																						.04	−.01	.03	−	−.02	−	−.02	−.02	.01	.02	−.03	.02	.07	.01	−
23																							.02	−.02	−	−.01	−	.00	.05	−.03	−.09	−.02	.07	−.06	−.10	−
24																								−0.4	−	.03	−	−.05	.07	−.06	−.03	−.02	.05	−.04	−.04	−
25																									−	−.01	−	−.01	−.07	−.01	.17	−.01	−.05	−.01	.46	−
26																										−	−	−		−		−		−	−	−
27																											−	−.01	.01	−.01	.12	−.01	.08	−.01	−.01	−
28																												−	−		−			−		−
29																													.04	−.01	−.02	−.01	−.01	−.02	−.02	−
30																														.14	.03	.01	.49	.69	−.01	−
31																															.01	.10	.11	.09	.02	−
32																																.05	.10	−.04	.81	−
33																																	−.01	−.02	.03	
34																																		.10	.06	−
35																																			−.04	−
36																																				
37																																				

Note: Coefficients attaining absolute values of .12 and larger reach statistical significance at the 5 per cent confidence level.
Values of .16 and larger reach the 1 per cent confidence level.
Blanks indicate that no coefficients could be computed due to low occurrence of the variable.

Variable Numbers

Identification of "Raw" Variables in Table E6.20

Variable
Number

Physical Aggression Measures

. 1   player's use of stick against stick of another player (soft)
2   player's use of stick against stick of another player (medium)
3   player's use of stick against stick of another player (hard)
4   player's use of stick against body of another player (soft)
5   player's use of stick against body of another player (medium)
6   player's use of stick against body of another player (hard)
7   player's use of body against body of another player (soft)
8   player's use of body against body of another player (medium)
9   player's use of body against body of another player (hard)

Verbal Aggression Measures

10   verbal aggression by player towards referee
11   verbal aggression by player towards coach
12   verbal aggression by player towards teammates
13   verbal aggression by player towards opponents
14   verbal aggression by player towards self
15*   verbal aggression by coach towards referee
16*   verbal aggression by coach towards coach
17*   verbal aggression by coach towards teammates
18*   verbal aggression by coach towards opponents
19*   verbal aggression by coach towards self

Non-Verbal Aggression Measures

20   non-verbal aggression by player towards referee
21   non-verbal aggression by player towards coach
22   non-verbal aggression by player towards teammates
23   non-verbal aggression by player towards opponents
24   non-verbal aggression by player towards self
25*   non-verbal aggression by coach towards referee
26*   non-verbal aggression by coach towards coach
27*   non-verbal aggression by coach towards teammates
28*   non-verbal aggression by coach towards opponents
29*   non-verbal aggression by coach towards self

Pro-Social

30   verbal pro-social act by player towards teammates
31   verbal pro-social act by player towards opponents
32*   verbal pro-social act by coach towards teammates
33*   verbal pro-social act by coach towards opponents
34*   non-verbal pro-social act by player towards teammates
35*   non-verbal pro-social act by player towards opponents
36*   non-verbal pro-social act by coach towards teammates
37*   non-verbal pro-social act by coach towards opponents

*Items not included in the summary variables.

Table E6.21

Summary of Analyses of Variance on Physical Aggression for Baseball Teams

	Source of variation	F ratio	Level of significance
Pre-treatment	age	9.89	$<.05$*
	treatment	4.17	$>.05$
	interaction	2.09	$>.20$
Mid-treatment	age	2.69	$>.10$
	treatment	.30	$>.20$
	interaction	.67	$>.20$
Post-treatment	age	.60	$>.20$
	treatment	2.46	$>.10$
	interaction	.90	$>.20$

Table E6.22

Means Values* for Age and Treatment Conditions, Physical Aggression – Baseball

Pre-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-8)	1.20	3.60	–	2.40
Older (11-12)	.20	.90	1.40	.83
Col. mean	.70	2.25	1.40	

Mid-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-8)	1.80	1.00	–	1.40
Older (11-12)	.23	.48	.85	.52
Col. mean	1.01	.74	.85	

Post-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-8)	.60	.80	–	.70
Older (11-12)	.62	.55	.20	.46
Col. mean	.61	.68	.20	

*Average number of instances per inning.

Table E6.24

Mean Values for Ages and Treatment Conditions, Non-Verbal Aggression – Baseball

Pre-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-8)	3.60	.50	–	2.05
Older (11-12)	2.20	2.80	1.40	2.13
Col. mean	2.90	1.65	1.40	

Mid-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-8)	.40	1.00	–	.70
Older (11-12)	1.40	1.70	.90	1.33
Col. mean	.90	1.35	.90	

Post-treatment

	Pro-social	Anti social	Control	Row mean
Younger (6-8)	.45	.15	–	.30
Older (11-12)	2.05	1.20	.25	1.17
Col. mean	1.25	.68	.25	

Table E6.23

Summary of Analyses of Variance on Non-Verbal Aggression for Baseball Teams

	Source of variation	F ratio	Level of significance
Pre-treatment	age	.18	>.20
	treatment	1.05	>.20
	interaction	3.02	>.10
Mid-treatment	age	5.92	>.10
	treatment	1.98	>.20
	interaction	.18	>.20
Post-treatment	age	26.60	<.005*
	treatment	12.05	<.025*
	interaction	1.15	>.20

Table E6.25

Summary of Analyses of Variance on Verbal Aggression for Baseball Teams

	Source of variation	F ratio	Level of significance
Pre-treatment	age	.18	>.20
	treatment	1.96	>.20
	interaction	.00	>.20
Mid-treatment	age	7.35	<.05*
	treatment	1.79	>.20
	interaction	1.20	>.20
Post-treatment	age	14.98	<.025*
	treatment	.70	>.20
	interaction	38.20	<.005*

Table E6.26

Mean Values for Ages and Treatment Conditions, Verbal Aggression – Baseball

Pre-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-8)	.65	1.50	–	1.08
Older (11-12)	2.60	2.60	6.15	3.78
Col. mean	1.63	2.05	6.15	

Mid-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-8)	1.80	1.10	–	1.45
Older (11-12)	5.58	2.70	3.45	3.91
Col. mean	3.69	1.90	3.45	

Post-treatment

	Pro-social	Anti-social	Control	Row mean
Younger (6-8)	.25	3.25	–	1.75
Older (11-12)	6.13	1.90	4.40	4.14
Col. mean	3.19	2.58	4.40	

Table E6.27

Summary of Analyses of Variance on Pro-Social Behaviour for Baseball Teams

	Source of variation	F ratio	Level of significance
Pre-treatment	age	1.96	>.20
	treatment	1.59	>.20
	interaction	.01	>.20
Mid-treatment	age	20.32	<.01*
	treatment	2.35	>.10
	interaction	.46	>.20
Post-treatment	age	4.62	>.05
	treatment	1.64	>.20
	interaction	4.83	>.05

Table E6.28

Mean Values for Ages and Treatment Conditions, Pro-Social Behaviour – Baseball

Pre-treatment	Pro-social	Anti-social	Control	Row mean
Younger (6-8)	20.20	6.90	–	13.55
Older (11-12)	29.95	18.10	18.55	22.20
Col. mean	25.08	12.50	18.55	
Mid-treatment	Pro-social	Anti-social	Control	Row mean
Younger (6-8)	7.10	4.00	–	5.55
Older (11-12)	21.53	14.65	13.95	16.71
Col. mean	14.32	9.33	13.95	
Post-treatment	Pro-social	Anti-social	Control	Row mean
Younger (6-8)	7.85	11.10	–	9.48
Older (11-12)	41.35	10.73	22.23	24.77
Col. mean	24.60	10.92	22.23	

Table E6.29

Correlations Among Summary Variables at Three Observation Times – Baseball

Pre-treatment	1	2	3	4	5
1. Television selection	1.00	.26	.41	−.20	.50
2. Physical aggression		1.00	.54	.25	−.08
3. Non-verbal aggression			1.00	.07	.40
4. Verbal aggression				1.00	.12
5. Pro-social					1.00
Mid-treatment	1	2	3	4	5
1. Television selection	1.00	−.06	.64	.57	.44
2. Physical aggression		1.00	.10	−.13	−.53
3. Non-verbal aggression			1.00	.54	.38
4. Verbal aggression				1.00	.77
5. Pro-social					1.00
Post-treatment	1	2	3	4	5
1. Television selection	1.00	−.60	.13	.26	.63
2. Physical aggression		1.00	.25	−.10	−.11
3. Non-verbal aggression			1.00	.48	.50
4. Verbal aggression				1.00	.82
5. Pro-social					1.00

Table E6:30: *Correlations Among "Raw" Variables—Baseball Group*

Variable key:

1. VA-player-referee
2. VA-player-coach
3. VA-player-teammates
4. VA-player-opponents
5. VA-player-self
6. VA-coach-referee
7. VA-coach-coach
8. VA-coach-teammates
9. VA-coach-opponents
10. VA-coach-self
11. NVA-player-referee
12. NVA-player-coach
13. NVA-player-teammates
14. NVA-player-opponents
15. NVA-player-self
16. NVA-coach-referee
17. NVA-coach-coach
18. NVA-coach-teammates
19. NVA-coach-opponents
20. NVA-coach-self
21. VPS-player-teammates
22. VPS-player-opponents
23. VPS-coach-teammates
24. VPS-coach-opponents
25. NVPS-player-teammates
26. NVPS-player-opponents
27. NVPS-coach-teammates
28. NVPS-coach-opponents
29. PA-equipment-body (soft)
30. PA-equipment-body (med.)
31. PA-equipment-body (hard)
32. PA-body-body (soft)
33. PA-body-body (med.)
34. PA-body-body (hard)

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
1	.15	.04	.19	.11	.41	.13	-.07	.00	-.04	.30	-.02	-.02	.01	.17	.13	-.02	.06	-.02	.01	.19	-.05	.06	-.04	.05	.05	.05	.01	-.03	-.03	.13	-.01	.05	-.01
2		.18	.14	.07	.18	.04	.07	.14	.02	-.06	.10	-.03	.02	.07	.06	-.02	-.02	-.03	-.05	.06	.08	.06	.09	-.02	.13	.12	.09	-.03	.13	-.02	-.06	.04	.02
3			.09	.16	.02	.06	.23	-.02	.04	-.01	.05	.10	.02	.17	-.01	-.04	.16	.03	.17	.27	.11	.12	.05	-.02	.05	-.05	.00	-.07	.13	.00	.04	.12	-.05
4				.06	.10	-.05	-.06	.18	.10	.10	-.01	.02	.02	.17	.18	.08	.09	-.06	.01	.23	.03	.13	-.05	.13	.06	.06	.00	.04	.11	.12	.01	.02	.08
5					.02	.01	.02	.01	.12	.03	.03	.05	.10	.12	.02	-.02	.21	-.03	.19	.04	.02	.03	.04	-.06	-.02	.05	-.04	.00	-.04	.10	.09	-.01	.08
6						.13	.11	.04	-.05	.18	.00	-.06	.04	.03	.25	.06	.11	.02	.07	.18	.02	.10	.04	.03	-.02	.08	-.02	-.08	-.03	.03	-.02	-.01	-.02
7							.06	.07	-.03	-.02	.03	-.04	-.04	-.08	.03	-.01	.08	-.02	-.02	.07	.08	.00	.04	.01	-.02	.01	.02	.00	-.02	-.05	-.01	-.02	.03
8								.06	.03	-.04	.14	-.01	-.08	-.03	.17	.13	.34	.04	.20	-.03	.12	.11	.09	-.13	.00	.06	.20	.07	.14	-.06	.06	-.04	.13
9									.23	-.04	.01	.02	-.04	.05	.06	.08	.04	-.03	.14	.07	.04	.07	.01	-.01	-.03	-.07	.04	.06	.08	-.05	.01	-.06	-.01
10										-.03	-.01	-.04	.01	.11	-.02	-.01	.13	-.01	.17	.07	-.03	-.03	.04	-.01	-.02	.02	.13	.08	-.04	.05	-.04	-.04	-.03
11											-.03	.17	.03	.09	.04	-.01	-.02	.22	-.05	.00	-.06	.02	-.04	.05	-.02	.10	.01	.00	.01	.08	.11	.08	.02
12												.02	-.02	.02	-.02	-.01	-.03	-.01	.12	.10	-.02	-.01	-.03	.06	-.01	.06	.10	.05	-.03	-.02	.04	-.04	-.03
13													.19	.05	-.05	-.02	.06	.20	.14	-.01	-.06	-.06	-.04	.06	.10	.04	-.03	-.02	.12	-.03	.36	.11	.11
14														.04	.00	-.01	-.03	.02	-.04	-.03	-.05	.01	-.04	.01	.02	.05	-.05	-.06	.04	.04	.10	-.01	-.01
15															.02	-.03	.05	.05	.12	.27	-.03	.25	-.02	.05	.09	.09	.18	.04	.10	.08	-.03	.03	-.05
16																.58	.35	-.02	.05	.06	.23	-.04	.10	.03	-.02	-.01	-.04	-.04	.01	.03	-.05	-.05	.01
17																	.35	-.01	-.01	.01	.44	-.03	.10	-.004	-.01	-.02	-.01	-.02	-.02	-.01	-.02	-.02	-.01
18																		-.02	.13	.11	.17	.08	.03	-.07	-.03	.06	-.05	-.06	-.04	-.02	.05	-.04	.12
19																			-.02	-.01	-.02	.04	-.03	-.02	-.01	-.03	-.02	-.02	-.02	-.02	.07	-.03	-.02
20																				.17	.03	.05	.08	-.001	-.02	.02	.03	.05	.06	-.04	.11	.00	.06
21																					.09	.29	.10	.34	-.01	.10	.05	.00	.03	.05	-.11	-.05	-.05
22																						.02	.44	.07	.06	-.07	.01	-.02	-.02	.00	-.06	.08	-.01
23																							.19	.03	-.03	.30	.04	.08	.11	.04	.00	.07	-.02
24																								.08	.10	.01	.22	.02	.01	-.06	.05	.04	-.01
25																									-.05	.26	-.05	-.01	.04	.03	.07	.04	-.04
26																										-.06	.31	-.02	-.03	.04	.02	.00	.01
27																											-.02	.05	.03	.02	.03	.00	-.01
28																												.06	-.01	.17	-.03	-.07	.12
29																													.03	-.02	.06	.09	-.03
30																														.03	.13	.07	.04
31																															-.03	.04	.03
32																																.20	.15
33																																	.08
34																																	

Note: Coefficients attaining an absolute value of .11 and larger reach statistical significance at the 5 per cent confidence level. Values of .14 and larger reach the 1 per cent confidence level.

Identification of "Raw" Variables in Table E6.30

Variable
Number

Verbal Aggression Measures

1	verbal aggression by player towards referee
2	verbal aggression by player towards coach
3	verbal aggression by player towards teammates
4	verbal aggression by player towards opponents
5	verbal aggression by player towards self
6*	verbal aggression by coach towards referee
7*	verbal aggression by coach towards coach
8*	verbal aggression by coach towards teammates
9*	verbal aggression by coach towards opponents
10*	verbal aggression by coach towards self

Non-Verbal Aggression Measures

11	non-verbal aggression by player towards referee
12	non-verbal aggression by player towards coach
13	non-verbal aggression by player towards teammates
14	non-verbal aggression by player towards opponents
15	non-verbal aggression by player towards self
16*	non-verbal aggression by coach towards referee
17*	non-verbal aggression by coach towards coach
18*	non-verbal aggression by coach towards teammates
19*	non-verbal aggression by coach towards opponents
20*	non-verbal aggression by coach towards self

Verbal Pro-Social

21	verbal aggression by player towards teammates
22	verbal aggression by player towards opponents
23*	verbal aggression by coach towards teammates
24*	verbal aggression by coach towards opponents

Non-Verbal Pro-Social

25	non-verbal aggression by player towards teammates
26	non-verbal aggression by player towards opponents
27*	non-verbal aggression by coach towards teammates
28*	non-verbal aggression by coach towards opponents

Physical Aggression Measures

29	player's use of equipment towards body of another player (soft)
30	player's use of equipment towards body of another player (medium)
31	player's use of equipment towards body of another player (hard)
32	player's use of body towards body of another player (soft)
33	player's use of body towards body of another player (medium)
34	player's use of body towards body of another player (hard)

*Items not included in the summary variables.

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The News Media
and
Perceptions
of Violence

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Contents

Preface

The research reported in this paper was performed over a seven-month period in 1976. It was sponsored by The Royal Commission on Violence in the Communications Industry. We wish to thank Mr. C.K. Marchant, the Director of Research of that Commission, for his encouragement and support of the original research reported here. Neither of us had ever before attempted to do this amount of research in such a short time. As it turned out, these time constraints had both beneficial and detrimental effects on the research.

Because we had to work to such a tight schedule, we didn't have the opportunity to spend much time worrying about which of a number of ways of approaching a problem was "best". Usually, we simply had to collect the data without the luxury of elaborate pre-testing and changing of stimulus materials and measures. Given the exploratory nature of much of this research, this "problem" turned out to be less serious than we had thought.

What was more unfortunate was the fact that we were not able to follow up a number of questions that deserve more attention. We expect, therefore, that many readers will ask themselves, "Why didn't the researchers do this, or that, or something more on a particular problem?" The answer is simple: All questions cannot be answered in a seven-month period. We do feel, however, that there are some provocative findings here that easily justify our time and the Commission's money that was invested in the project.

We wish to thank Mr. Julian Roberts for his tireless work on this project. His ingenuity in finding solutions to problems, his imagination and intelligence in designing stimulus materials and dependent measures, and his knowledge both of the content area and research design, all combined with an enormous amount of work and dedication on his part to produce a report more comprehensive than we thought possible in the (short) time available.

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January 1977

A: A Survey of Findings and Conclusions

The purpose of the research reported in this report is to examine the effects of news media (television, radio, newspapers) on people's perception of violence in the world around them. Obviously, this is an impossibly large topic, and, as a result, we have narrowed our focus to two main approaches. In one set of studies, we tried to manipulate the kind of news information people were getting (in an experimental setting) and then see how this affected their perception of the general kind of violence they had just been exposed to. Secondly, through a survey, we tried to measure the feelings that people had about their environment in terms of frequency of violence, location of violence, relationships between attacker and victim, and measures to counteract violence.

All of this research deals with the question of social perception. We have left to others the question of whether these effects are translated in various ways into behaviour. Thus, when we talk about the effects of the media in this report, we are not concerning ourselves with questions such as whether the portrayal of violence in the media is likely to make people more aggressive or altruistic; rather we are concerning ourselves with whether the portrayal of violence makes people feel that the world around them is a violent place.

In terms of social cost, distorted social perceptions can be every bit as expensive as anti-social behaviour, if not more so. For people to come to believe that strangers are enemies or that public places and facilities are dangerous is every bit as destructive to the fabric of a society as violent behaviour itself. In fact, history has shown that to some degree a wide variety of social sanctions can curb violent behaviour. However, we have not yet learned how to convince members of society that they should not avoid people and places when they have been convinced, in many cases wrongly, that such people and places are dangerous. Recent experience in this regard has shown that there seems to be a very powerful social force at work. Exaggerated fears tend to cause people to avoid places, facilities, and certain classes of other people, and this in turn leads, in fact, to increased violence associated with those very elements that are being avoided. Such a positive-

feedback loop once established seems difficult to break. And, there are numerous North American examples of the social and economic costs of such situations.

In some ways, of course, it is impossible to deny that the media shape our view of the world. As behavioural scientists, we find it difficult to conceive of the possibility that the reporting of particular kinds of incidents in the media will not affect our general view of the world in which we live. People obviously build up a general view of the world in which they live from the specific incidents that they experience directly, or that they hear about from others, or that they read, hear, or see, in the media.

The problem, of course, is that the media cannot give what might be called an "accurate" view of the world that they are reporting. What is news is, for the most part, what is unusual. This, then, leads to the basic problem: it could be argued that the media are reporting events *because* they are unusual, yet the view that people have of their world is based on the integration of all of these unusual events. Furthermore, it is possible that at times the media actually *try* to make unusual events sound more usual: it is, perhaps, more newsworthy if one can convince an audience that something that they might have thought was unusual is, in fact, a common event. Thus, for example, in reporting an apparently racially motivated attack on two people on the subway on New Year's Eve (1976) in Toronto, Peter Silverman, of Global News, reported in his most dramatic and concerned voice: "This is the second such racial incident on Toronto's subways in less than a year." (Note that although this quote is as accurate as we can recall, it may not be perfectly accurate. The sense of the statement, however, was as indicated.) In other words – perhaps to make news on an otherwise slow day for news – Silverman implied that this was a common event on Toronto's subways. Another way of reporting that same event would be to say: "There have been only two such incidents reported in the past year." From our point of view, it would appear that Silverman's way of reporting the event makes the subway seem more dangerous than would a more "neutral" way of presenting the event. The general

point, however, is that different ways of presenting events can affect the way in which we see events generally.

Given that the media are, by their very nature, going to be reporting unusual events, what can be done? One way might be to consider the various methods by which news can be reported to the public. Presumably one of the functions that the news media have for themselves is to educate people about the way things "really are" in society. Reporting unusual events as just that – unusual events – may be one way in which their importance can be kept in perspective.

The existing literature (which is summarized in Section B of this report) indicates that there is relatively little research that has been done on the question of the effects of the media on people's views of how dangerous is the world in which they live. The work that has been completed in this area is highly speculative and the results are far from specific. A number of studies have shown, not surprisingly, that the frequency of news stories, particularly in newspapers, does not match the actual frequency of the events reported. The distortion is always in the direction of over-reporting crime and violent crime. Taken as a whole, this previous literature strongly suggests that the media are responsible for a distorted social perception of violence. However, there is little straightforward evidence as to specific effects or the mechanics of such effects.

Thus, partly for practical reasons and partly due to historical accident, the emphasis in the empirical research work has been on the behavioural effects of the media. We then took a very different tack. We asked the question (in its most general form): Does the exposure in the media to reports of individual crimes make people feel that they live in a dangerous world? In Canada, we are in an unusual, and perhaps unfortunate, position: by having access to the American media, we are likely to be exposed to an amount of violence that even exceeds their high level of societal violence. Furthermore, since our level of societal violence is (particularly in the cities) considerably lower than theirs, if residents of Canada learn about societal violence from the American media, it is inevitable that their estimates will be too high.

The first set of studies that we did were experimental in nature. They, and their results, are described fully elsewhere in this report. In general, all these studies involved presenting news reports of violent crime and, for example, as our experimental manipulation, adding factual background information to the report. Groups of subjects read either the "straight" story or the story with supplementary information and then responded to a series of questions covering their beliefs about violence as they pertained to the incidents in question. Because of the time constraints on us, we were not able to explore as deeply as we might have wanted to the exact situations that seem to increase the likelihood that people's view of the probability of certain kinds of

crime will increase. As will be seen from reading the detailed reports of the experiments, we did not always find significant differences due to our manipulations. However, it did appear that under some circumstances certain variables did have an effect. In Studies V and VIII, for example, we varied the relationship between the victim of a crime and his assailant. In both of these experiments, the manipulations had some effects. In Study V, for example, when a beating was described as being committed by strangers, people were more likely to see victims of assaults *generally* as having been completely unknown to their assailants than if they read of a beating having been performed by someone previously known to the victim. Question 10 of the survey (see Study XI) revealed that people generally feel that they are much more likely to be seriously harmed by a complete stranger than by someone whom they already knew. (As the statistics indicate, most real violence is committed by persons previously known to the victim.)

Taking these two findings together, one might infer that because a beating by a complete stranger is newsworthy, whereas a fight between relatives or neighbours is not, it is the former kind of crime that is likely to be reported. Hence, most people feel that assaults normally are between complete strangers: that is what they read about in the newspapers.

However, the results of our experiments on this issue are not completely clear. In Study VIII, we varied the same variable, and the results were somewhat different. In that study, one group of people listened to what they thought was a recording of a radio news broadcast in which there were no stories involving crime. A second group of people heard the same broadcast except there was a story included in which a person was beaten up by some strangers. A third group of people heard the news broadcast with the assault described, except that for them the apparent assailants were relatives of the victim. In this experiment, hearing about the assault, *no matter who was described as being the assailant*, increased the assumption that strangers are the ones who commit such crimes. Thus, hearing about the crime affected the subjects' perceptions of the victim-assailant relationship, but the actual relationship described had no effect. We have no straightforward explanation for this finding, except, perhaps, to suggest that the manipulation of relationship was not as strong as it might have been.

More consistent are our findings on giving people information about how unusual a crime is in the society in which they live. In three separate experiments, using newsprint (Study VII), radio (Study IX), and television (Study X), a murder was described as apparently having been committed by a stranger to the victim. One group of subjects simply got the straight story about the murder. A second group of people read/heard/watched the same story, except that they were given "authoritative" information (attributed to a police officer) that murders committed by persons unknown to

the victims were rare. A third (control) group did not read/hear/see a story about the murder. In all three experiments, the "authoritative information" had an educative effect. Although people had just heard about a murder, which apparently was perpetrated by a stranger to the victim, they were dramatically influenced by the information that it was unusual.

It may not always be possible to put a given crime in a context such as this. However, these studies do show rather convincingly that this is one way in which the media, if they want to, can have an educative effect on the people exposed to them. In this way, events that are particularly unusual might be reported, but would not have dramatic effects on the public's perception of crime.

Thus, with people apparently over-estimating the number of violent crimes that take place in the subway (see Questions 5, 26, and 27 of the survey, Study XI), it might be helpful to try to give information about the likelihood of a person's being a victim of a crime on the subway when the next "subway incident" is reported.

A further study showed, however, that stories about how crime is over-estimated are not invariably going to have dramatic effects on people's perception of crime. The feature story in *The Toronto Star*, October 23, 1976, that served as the stimulus for Study XIII demonstrates that quite convincingly. In that study, people were asked to read the front section of the *Star*, which reported that people tend to over-estimate crime. However, the material that was presented and the manner in which it was presented tended, it appears, to counteract the "good" effect that was apparently intended: talking about crimes that have taken place and giving people information on how to avoid crimes would appear, if anything, to reinforce the belief that crime is all around us.

In his series of studies relating television-viewing to feelings of vulnerability, Gerbner has suggested that people who watch a lot of television are more likely, because of the content of that television, to view the world around them as dangerous. The hypothetical mechanism for this, presumably, is that the material that a person exposes himself to on television *becomes* reality. Given that there tends to be an over-representation of violence on television (compared to what the world is really like), those who watch television perceive reality as violent.

At the most simple level, we replicated Gerbner's results. As reported elsewhere in this paper, there is a significant relationship between television-viewing and the perception of the likelihood of various violent events. Looking at these results question by question (see Study XI or Appendix II for copies of the exact questions), we find that the more television people watch, the higher the perceived likelihood of being a victim of a street crime (Question 2), the higher the perceived likelihood of a child's being attacked in a park (Question 3), the higher the perceived likelihood of

an adult's being attacked in a park (Question 4), the higher the perceived likelihood of a woman's being a victim of a violent crime in a subway (Question 5), the higher the perceived likelihood of the respondent's or a close friend or relative of the respondent's being the victim of a serious assault during the next year (Question 6), the higher the likelihood that there are areas near where they live where they are afraid to walk alone at night (Question 9), and so on. However, we believe that this is an oversimplification of the findings.

In the first place, it must be emphasized that all of these correlations are very small. Though significant (partly because there were over 400 respondents to the questionnaire), television-viewing does *not* account for much of the variation in how dangerous people view their environment as being. The correlations just mentioned account typically for less than ten per cent of the variance.

Secondly, as we have pointed out in the more complete report of the survey findings, these correlations appear in many cases to be an artifact of the fact that various other social characteristics vary with television-viewing. For example, the people in the low crime area of the city of Toronto watched about half as much television as did the people in the downtown high crime area. To the extent that people's view of crime is positively correlated with reality, then, one would expect a correlation: It *is* more dangerous in the area of Carlton and Sherbourne streets than it is at Avenue Road and Eglinton. The people downtown watch more television; hence the over-all correlation.

As we indicate in more detail later in the report, there are some correlations that seem to be consistent in all of our sampled areas. These too, however, could easily be interpreted not as television *causing* people to view their environment as dangerous, but rather as due to other social characteristics that are uncontrolled in the survey that we did. Thus, for example, if total television-viewing is correlated with some variable such as social class, and if the belief that people should arm themselves is also a function of social class, then the correlation that we report between television-viewing and the feeling that people should be armed may be an artifact of social-class variation.

We are left, then, with what might appear at first glance to be a contradiction: we found that exposure to particular stories had rather dramatic effects on people's views of the nature of certain kinds of crime – for example, whether the crime was, in general, one that was likely to have been carried out by acquaintances or strangers – yet we are saying that the results of the survey question whether the amount of exposure to, for example, television, has much of an effect on people's views of the likelihood of certain kinds of crimes. In the first place, the incidents that showed consistent effect (murder) are rather dramatic and, happily, relatively unusual events. Furthermore, although there was a great deal of variation in the amount of exposure to the

media in our survey, the over-all amount was fairly high. We have listed below the over-all amounts of exposure to the media to illustrate this point:

Total television viewing	Mean of 29.9 programs per week
Violent television	Mean of 4.1 programs per week
Television news	Mean of 4.17 programs per week
News on radio	86.7 per cent report listening to radio news at least three to four times per week
Newspaper	78.3 per cent report "reading" a newspaper at least three to four times per week

It would appear that a dramatic event that might be reported in all three media would, almost definitely, come to the attention of just about everyone in the sample.

Thus, when one looks at the experimental studies along with the survey results, it seems quite possible to us that these dramatic incidents are going to have their effect on the population at large independent of the actual amount of exposure to the media. The dramatic events are going to be reported in such a way that people will hear of them either directly or in conversation with friends.

What then can be recommended? In the first place, it seems to us that we must consider all of the news media rather than concentrating on any one. In our own experiments, we simulated, across different experiments, newspapers, radio, and television and found reasonably similar results for all three. Probably the strongest recommendation to follow from our report is that the media should, much more than they do at the moment, try to put the events that they report in context. Obviously, the media are in the business of reporting unusual events. Unfortunately, certain kinds of data that point out exactly how unusual an event is don't appear to make the news. A number of examples can be picked, and some of the newspaper stories referred to in Study XII could be used as illustrations. Our own (partially fictitious) stories from the experiments are examples. Data could be presented when reporting crime on whether a particular crime fits into the general pattern. The problem in doing this is that we are suggesting that reasonably *hard* data be used, not the *impressions* of news reporters or of anyone else. To the extent that stranger-to-stranger violence is unusual, for example, this could be reported in the context of the reporting of crime. Clearly when two men who know

each other start arguing and a fight begins, the fact that one is badly hurt isn't really as interesting to anyone as a situation in which one man attacks another whom he doesn't know on a street for no apparent reason. The second story, we suggest, is much more likely to be reported and we are not quarreling with this type of editorial decision. However, if the public perceives that the second type of event is much more likely than the first and in fact the opposite is true, then the media might want to consider trying to put these stories into context.

Similarly, although we don't have any hard data to suggest that it is happening, it seems possible to us that the reports of "racially motivated" attacks on the subway will make people (presumably particularly of non-white races) feel that the subway is dangerous. One might suggest that the context for stories like this could include investigations of whether the events were, indeed, *racially motivated* as opposed to being attacks by whites on non-whites for other than racial purposes. The fact that racial slogans were used does not necessarily mean that the event was "racially motivated"; they may merely have been verbal abuse after the event was commenced. Similarly, it seems quite likely that similar incidents between members of the same race would probably be less likely to be reported even to the police. And, of course, before suggesting that the subway is dangerous for anyone, one might want to consider the fact that almost a million fares are paid each day on the TTC and presumably only a small portion of the riders of the TTC have ever been victims of violent crimes.

Other kinds of incidents would be easier to put in some kind of context. Occasionally, when the perpetrator of a violent act is identified, it is found that he once spent some time (perhaps even recently) in a mental institution. This is clearly interesting to the public, and I suspect that a reporter who discovered this fact about someone who has just acted in a violent manner would report this history of mental illness. The danger, of course, is not that people will learn this fact about the person in question, but rather that they will generalize it to all people who have once spent time in a mental hospital. Thus, "context" information might be the number of people released from the mental institution (during some appropriate time period) and the proportion of them who were involved in violence after their release. We suspect that such data would show that the "violent mental patient" was the exception rather than the rule.

In theory, there are two ways in which such information could be brought to the public's attention: through the use of "feature" stories (see Study XIII) or by integrating the information into the news story. Our one study with a feature story would suggest that the feature-story approach is not very effective. It is, of course, possible that the particular feature story used in this study was not optimally written. Further research

would be needed in order to discover this. Quite possibly, the mere discussion of crime in that story made it appear that crime was a real problem. We are not convinced, however, that this is likely to be a useful approach to the problem.

The second possible method is, unfortunately, much more difficult. To suggest that reports of crime should include information about its likelihood in general means that those people writing about crime are going to have to do much more work for each story. Just as a doctor who finds that a patient who is taking a drug has a particular symptom must do background work to discover whether the drug causes the symptom, we are suggesting that the reporter of news should try to be more of a scientist when reporting the elements of violent events. In this way, the importance of any variable (race of the participants, relationship between the participants, et cetera) can be put into context.

The Effects of the Media upon Social Perceptions, with Specific Reference to Violence: A Literature Review

Since the explosion of the mass media in the early part of this century, their effects on behaviour and attitudes have come under much scrutiny from members of the public and the social sciences. The questions that have dominated research are easy to formulate but less easy to answer: whether the media do exert a strong influence, and if so, in exactly what ways?

The effects of the media, as seen from the perspective of vicarious living (their content providing models for public action and opinion), have been debated for a long time. In fact, this question was raised as early as the sixteenth century. The writer Montaigne was well aware that the border-line between real and vicarious living was frequently blurred by the impact of a performance upon the actor or the audience. Researchers concerned with the impact of violent television on today's viewers are asking essentially the same question.

Early studies in the field of mass communications focused primarily on the newspapers. These have subsequently given way to the television and movie screen, which now dominate the field. Over the years there have been a number of projects that have focused upon different areas of the mass communications field and yet a definite pattern has still to emerge. Although many of the studies have little in common, it is perhaps still surprising that few general conclusions have been made to the satisfaction of more than just a few researchers. Most of the work has been carried out starting from the initial premise that the media do have some effects on social perceptions, but even this basic assumption has been abandoned both prior and subsequent to some studies.

Many investigators take the cautious approach, best represented by Wilbur Schramm (1961), one of the most important researchers in the field, who after a number of years' work came to the conclusion that "some kinds of communications on some kinds of issues, brought to the attention of some kinds of people under some kinds of conditions, have some kinds of effects". The remark is honest, if not illuminating, and reflects the lack of consensus in much of the research up to now.

Given this rather pessimistic introduction, there are nevertheless, a number of studies that produced significant results, which taken together begin to indicate several important conclusions concerning the effects of the media on a person's social perceptions, attitudes, and social conduct. Some of these studies will now be summarized.

If the mass media are not as effective in changing people's perceptions as their ubiquity may lead us to believe, at least they do determine which issues are considered most important at the time. The news and entertainment media may not create our opinions outright, but they do make us more aware of certain issues and suggest the amount of importance we should attach to them. With news, this is achieved by the amount and prominence of space or airtime that is allotted to each specific story. The stories we read and the broadcasts we listen to contain more than just a summary of the events in chronological order, they also contain everything that the editor or broadcaster considered important. The reader or listener will absorb not just the story, but the editorial slant as well. This bias will be adopted – to a greater or a lesser degree, depending upon a number of variables – as his own. In any case, the reader or listener is deprived of the information or news that has not been covered or that has been edited out.

There are some individuals for whom the mere fact that a story has been committed to newsprint bestows upon it the mantle of truth. It is these people who are most likely to have their perceptions of reality and subsequent behaviour drastically altered by what they read. Numerous examples have been produced to sustain this conclusion, the most spectacular instance of which was the Ahmedabad riot in India where rumours, once published by the papers, actually triggered a serious event.

In terms of specific media effects, a study was carried out by Belson (1957) which investigated the effect, on people's attitudes, of a series of 30-minute television documentaries devoted to the treatment of mental illness. Viewers who had watched the series were compared to others who had not on a number of questions measuring knowledge of mental illness,

attitudes towards therapeutic techniques, and feelings about associating with ex-patients. The viewers were tested from one to 14 days after the last show in the series. Among the results were the following: knowledge of mental illness was increased by the series, as was confidence in the ability of practitioners, willingness to associate with an ex-patient, and, more importantly, the proportion perceiving mental illness to be a major problem. In this example, a fairly small-scale series of programs achieved a significant shift in the viewers' perceptions of the subject matter. Whether this positive shift was more than just temporary is hard to say, since no follow-up studies were carried out in the ensuing months or years.

A recent study presents some interesting findings concerning the relationship between the media's coverage of social issues and the public's opinion as to what actually constituted the important problems. This study (Hubbard, Defleur, and Defleur, 1975) was conducted in a medium-sized American city. An analysis of the media emphasis was conducted on the content of local newspapers and television. Social agencies in the area, such as the police and the courts, provided frequency data for a number of social problems, and these were compared to the residents' concern for these problems as measured by public survey. It turned out that crime was the number-one issue in the media but the number-three issue in the public's eyes, and the number-two issue in terms of agency records. The various issues are ranked in the following table:

	Public	Media Exposure	Agency Records
1.	unemployment	crime	unemployment
2.	juvenile delinquency	transportation disruptions	crime
3.	crime	discrimination	alcoholism
4.	drug abuse	unemployment	transportation disruptions
5.	alcoholism	drug abuse	juvenile delinquency
6.	transportation disruptions	juvenile delinquency	mental illness
7.	mental illness	sexual deviancy	sexual deviancy
8.	sexual deviancy	mental illness	drug abuse
9.	discrimination	suicide	discrimination
10.	suicide	alcoholism	suicide

The most important problem to the public and the social agencies was unemployment, which ranked fourth in media exposure. Transportation disruptions and disasters were ranked second in terms of media exposure yet only sixth in the public's eyes. Alcoholism

placed third in the agencies' hierarchy, but was at the end of the media's list. The media seem then to have been emphasizing issues that were not so important to either the public or the social agencies. In terms of statistical analysis, it was not possible to predict media emphasis given the ranks generated by the social agencies. Interestingly enough, the public's rankings were much closer to the more objective social agency ones. This implies that people are better informed than many researchers would have us believe. It also may lead some to believe that the hold of the media over public opinion is not as strong as was originally feared.

However, the results of a study by Davis (1951) suggest that the newspapers do have a definite effect on peoples' perceptions of a social issue such as the prevalence of crime. In his study of Colorado papers, Davis found that the amount of crime reported was not related to the amount recorded by the official statistics. When he measured public perceptions of the general crime picture, Davis found that the people concurred with the media trends, not the ones released by the official agency. Although no official figures will ever report the true incidence of every type of crime, they are probably the best estimates available. In this instance at least, the public subscribed to the distorted image presented by the papers.

Another investigator (Roshier, 1973) assessed the selection of crime stories in a variety of newspapers and concluded that they deliver a distorted impression of criminal activity and that this trend is quite stable over time as well as being applicable to several diverse publications. If one accepts the proposition that the papers exaggerate some issues at the expense of others, one has to question their basic purpose, namely informing and instructing the public. By stressing some issues, it is obvious they could be creating concern where it is unnecessary and diverting public attention from where it is vital.

In a study conducted in London, Ontario, Seacrest (1972) analyzed the local newspapers for a whole year and then compared their coverage of crime with public attitudes concerning the relative seriousness of various crimes. This study revealed a significant correlation between the amount of newspaper space given various types of crime and the public's perceptions of how serious they were. The main newspaper in question – *The London Free Press* – was also found to give far more coverage to rare crimes; in fact, it did not reflect the actual trends of criminal activity in any way. A quote from the President's Commission (1967) on the public's fear of crime sums up this kind of research neatly:

The fact is that most people experience crime vicariously through the daily press, periodicals, novels, radio, and television, and often the reported experiences of other persons. Their fear of crime may be more directly related to the quality and amount of this vicarious experience than it is to the actual risk of victimization.

Berelson and Steiner (1964) propose a cumulative-effect

model for the process of mass communications. According to these writers, when the media continue to force an issue on the public, following article by article and editorial by editorial, those members of the public that were in any way undecided to begin with begin to drift into the position advocated by the press. Interest is generated in formerly apathetic viewers, and where before there was only an uneasiness about some issue, now it is developed into a full-fledged fear. Berelson and Steiner use data derived from political surveys to support this position.

The phenomenon in which the undecided voter, or someone uncommitted to an issue, becomes more and more sure of his/her position as the media campaign progresses has been observed on several occasions. As the media campaign related to Britain's application to the Common Market progressed (prior to a referendum on the matter), the nation gradually changed its stance from an antagonistic to a supportive position.

Over-exposure of some issue also intensified person-to-person influence by promoting discussion of the topic. Who has not participated in a coffee-break discussion of the events or issues presented on the news the night before or in the papers earlier the same morning? Increased debate is in itself not without an effect; it raises awareness both of the topic and the concern of others. The impact of an event is greater knowing that both the editor of a major newspaper and the person at the next desk in one's office are offering their views.

There are studies (Lewin, 1953, as quoted in Berelson and Steiner, 1964) that indicate that group discussions are more effective in changing perceptions or attitudes than formal lectures or exposure to a television, radio, or newspaper bulletin. Perhaps the two are sequentially related on an everyday basis. If the media are responsible for determining the issues people consider important, they are also partly responsible for determining what people discuss in formal and informal groups. Having been influenced by a series of newspaper articles on a particular topic, members of the same office, department, or company are likely to discuss that topic when they converse. To quote Berelson and Steiner: "In general the use of both (mass media and personal discussion) together is most effective of all: the media provide the background, the personal contact is more likely to secure acceptance."

Just the act of participating, of passing along information, will lead to greater retention of that knowledge on the part of the informant. Someone passing along the contents of a newspaper story on, say, the increase of rapes in public places, is more likely to recall those contents than someone else who reads the same article but does not actively communicate it. This finding (Janis and King, 1954, as quoted in Berelson and Steiner, 1964) was true regardless of the person's opinion on the matter described.

In a short paper that includes no experimental findings or correlational statistics, Bryan Wilson (1961) contends that "the full significance of the influence of television, radio, cinema and press will perhaps never be adequately measured, partly because their influence cannot be isolated and partly because this influence is gradual and cumulative." The media according to Wilson are "increasingly influential in moulding the climate of opinion – perhaps even more effective than the educational and religious agencies of our society". Since this article was written fifteen years ago, many writers would now insert "certainly" in place of the qualification "perhaps" in that last sentence.

Wilson is aware that when attitudes change, values and behaviour will follow: what was prohibited yesterday is permissible today and perhaps desirable tomorrow. If people become more tolerant of violence in the city, they are less likely to condemn acts of brutality. Even if they just believe others to be more tolerant of violence, they are more likely to expect it when it does occur. Their behaviour will reflect their changed attitude.

Among the points made by Wilson are the following: (a) the media exaggerate the extent and frequency of crime and they add drama to purely factual material; (b) they have helped create a more tolerant climate for deviant behaviour; (c) they have presented deviant behaviour as part of the youth culture; and (d) they have glamourized the criminal and thereby changed the public's attitude towards him from one of moral disapproval to one of qualified admiration. News, suggests Wilson, has become redefined as "socially deviant behaviour by individuals or groups".

There has certainly been an increase in the amount of space devoted to crime in the newspapers; studies from an earlier period indicate space percentages from around three to seven per cent for the average American newspaper. A study cited in Lippmann's classic *Public Opinion* estimated that approximately four to six per cent of the column space in pre-World War One papers was devoted to crime and violence. In another study by Harris, the violent crime content remained at a constant level from 1890 through 1921. Seven per cent seems remarkably low by today's standards, even for the more tasteful and responsible publications. The proportion of column space devoted to crime in some papers is quite staggering, for example *The Sun* or *The Daily Mail* in England and *The Toronto Sun* in Canada.

There is at least one report that suggests the public may not in fact want so much brutality thrown at them by their daily newspapers. Howitt and Cumberbatch (1975) describe a study that found that a definite majority of the *News of the World* readers thought their paper contained too much crime and violence. This paper, incidentally, is notorious for its insatiable appetite for crime, sex, and violence. The nearest equivalent this side of the Atlantic pales by comparison. This discrepancy between what the people say they want and

what they actually read has been demonstrated on a number of occasions.

A further quote on the subject of the public's desire for sensationalism and the papers' willingness to gratify it, comes from an American writer:

In fact the reason we have newspapers at all, in the modern sense of the term, is because about one hundred years ago, in 1835 to be exact, a few newspaper publishers in New York City and London discovered 1) that most human beings if they could read at all found it easier to read news than editorial opinion and 2) that the common man would rather be entertained than edified. At any rate it is to the consistent application of the principle involved that the modern newspaper owes not merely its present character but its survival as a species. [Introduction to *News and the Human Interest Story* by H.M. Hughes (1946).]

Realism in the various media has recently become a very controversial issue. The more perceptive members of the population have always questioned the accuracy displayed by the media. A study by J.R. Dominick (1973) has not only quantified this accuracy but also sustained the scepticism. The fictional portrayal of the real world is seldom accurate and frequently presents an inverted picture of reality. A frequency table comparing television crimes to those that occur in real life revealed a negative correlation between the two. Murder and serious assaults are over-represented on the small screen while property offences and lesser crimes against the person are under-represented. In addition, the vast majority of fictional murders and assaults are premeditated, whereas in reality premeditated murders are the exception rather than the rule. Murders are quite often committed by someone who is a stranger to the victim in the fictional world, although such murders are a rarity in real life ("Homicide in Canada", Statistics Canada, June 1976).

Perhaps the most ambitious and comprehensive research project in this field (Gerbner, 1975, Gerbner and Gross, 1976a, and Gerbner and Gross, 1976b) espouses the view that television is a unique medium and as such should be the object of special attention. The head of this project, George Gerbner, believes that the small screen is the "central cultural arm of American society". In this capacity it acts as a social stabilizer and reinforces conventional conceptions and values. This point about the social-reinforcement effect of television is shared by, and possibly originated from, Herbert Marcuse, who claimed that television indoctrinates its audience, primarily, but not exclusively, on a political level.

For Gerbner, the presence of violence in the media is a question of general long-term social effects rather than the direct modelling consequences that concern experimental psychologists such as Berkowitz and Bandura. In fact, Gerbner rejects the experimental method, finding it hard to impose the rigid structure upon a variable such as television exposure, which is hard to pick out of the total cultural background. The world of television cannot be reduced by an atomistic model; its

structure cannot be measured by exposure to one program or one series of programs.

Viewers do not just pick up cues on how to behave; they derive from television a basic knowledge of society's superstructure. More than that, television presents its audience with a global image of the nature of human affairs. It selects, invents, distorts, and rejects material from real life and then packages the new product in an entertaining style.

Gerbner and his associates describe the "cultural indicators" approach whereby large, representative sections of television's total output are monitored and analyzed. This analysis is then viewed in conjunction with estimates of the public's perceptions of social issues that could be affected by television. To each of the questions put to respondents in the surveys, there is a "television" answer, reflective of the world portrayed on television. The investigators then compare the number of television answers found in samples of light and heavy television consumers.

So far as content goes, Gerbner's analysis has uncovered some interesting trends in television drama. Three-quarters of all leading performers are male, American, upper-middle class, and in their twenties. Apparently, women are still to be found mainly in roles that are associated with sex or marriage. One-fifth of the characters are employed in a violent occupation, either as criminals or law-enforcement officers. More importantly for this study, violence on television is only rarely a result of personal quarrels: for the most part it occurs between total strangers. This is the same impression one might get from the newspapers, where stranger-to-stranger violence is blown out of all proportion.

The most important part of Gerbner's research pertains to the effect of television on viewers' perceptions of social reality. In response to questions relating to their estimates of the likelihood of being involved in violence, the "heavy" television viewers consistently chose the television answer (that is, the one that was biased towards over-estimating this danger). Watching a lot of television seems to have the effect of developing exaggerated fears in its viewers. People who watch a lot of television begin to see the real world along the lines of the fictional creation. Gerbner concludes that his data present us with strong evidence that this medium at least is having an adverse effect on its audience. We now have, as Gerbner says, "evidence to suggest that television viewing cultivates a general sense of danger and mistrust". The social consequences of this conclusion can only be detrimental to the community as a whole. A different and more complex interpretation of Gerbner's results can be found in Study XI of this report.

Despite the controversy in recent years surrounding the violence presented to television audiences, Gerbner notes that there has been no reduction in the over-all violence index (measuring the amount of aggressive violence on television). There has been a slight

reduction in the amount carried during the networks' "family hour". The recent decision by the United States Supreme Court declaring the family hour concept unconstitutional may threaten this potential prime-time refuge from violent programs. The networks are now less constrained from inserting the all-too violent, all-too-popular crime shows in that time slot. One of Gerbner's early findings was that violence was portrayed in eight out of every ten televised plays from 1969 to 1970. There seems little reason to believe that this trend has altered since.

R.K. Baker and his colleagues (1969) generated the following norms from Gerbner's data. The ensuing guide to behaviour then follows:

1. Non-whites are more violent; therefore, avoid them if you want to avoid being assaulted.

2. Strangers are more likely to assault you than someone you know, therefore avoid strangers.

3. Policemen are more likely to use violence than the average citizen; therefore expect violence from the police.

4. Witnesses to violent incidents do not get involved; therefore do likewise.

5. The use of violence often goes unpunished either formally or informally; therefore violence may be employed without a strong chance of being punished.

There is certainly cause for concern if television viewers are extracting these perceptions and then modifying their behaviour accordingly. It is probably more than a coincidence that the type of crime given priority treatment by the newspapers, that is, violent assaults and murders by strangers, is also the kind of assault most feared by the public. Most people in Canada at least are not aware that most violent assaults occur between people with some established relationship. If the papers were accurately reflecting patterns of crime, the public would be more aware of the true incidence of crimes and less afraid of the kind that are dramatic but rare. In a public opinion poll conducted in the United States, 41 per cent were afraid to walk at night in the area around their homes. This is presumably a result of their fear of strangers. Seacrest quotes two sources (a National Opinion Research survey and another by the Bureau of Social Science Research) that both indicate that the vast majority of people derive their perceptions of crime from the news media and from personal communications, rather than from personal experience, specialized reading, or government agencies.

Hartmann and Husband (1974) ran a study investigating the impact of the media upon people's perceptions of the race problem in England. It has some interesting findings that pertain to the general effects of mass media. These authors gathered data from two groups, one of whom lived in an area containing a high percentage of non-white immigrants. These white residents were supposed to have obtained much of their information about coloured people from direct personal experience. The second group (again only white Britons) came from an area very low in non-white immigrants; residents of this area presumably derived their knowledge and attitudes from the media.

When they compared media-derived perceptions with others originating in personal experience, the authors found that the former seemed to relate to opinions about the general state of affairs whereas personal experience was more likely to shape an affective response such as a prejudicial attitude. The media seemed to determine the person's perception of the nature of the situation, while his personal experience then affected how he felt about non-whites. Residents of the low personal experience (high media reliance) group listed far more problems associated with racial integration than did those from the high personal experience (low media reliance) condition. In other words, people who were forced to rely on the mass media perceived racial integration as a far greater social problem than other individuals who were more able to rely on personal experience with non-whites. Television was regarded as a reliable source of information, whereas newspapers were treated with far more scepticism. The mass media became, naturally enough, more important as information sources as the opportunity for personal contact with coloured minorities decreased.

Hartmann and Husband cite the popularity of Mr. Enoch Powell with the British press as a good example of the medium's ability to alter public awareness of issues and individuals. From 1968 onwards, this particular Member of Parliament became (and remains) as visible to the general public as any member of the Cabinet. This rise to prominence, almost equalling that of the Prime Minister, was secured solely by his controversial and extremist view on immigration controls, which was exploited by the press from the moment it was first expounded.

The authors state that "the kinds of meaning that race-related words are likely to acquire through persistent use in these kinds of contexts are fairly obvious. For a hypothetical person whose understanding of the (racial) situation came solely from reading headlines, 'race' would be likely to acquire connotations of conflict, dispute and violence in some degree at least. Specifically race rows, rumpuses and racial clashes would appear to be fairly common occurrences, with a good sprinkling of riots, killings and shootings." The press are, thus, altering the public's perceptions not just of the non-white population but also of the nature of racial conflict.

When they analyzed various newspapers for material on race relations, the authors found a close correspondence with the perceptions derived by the people from the media. The channels of mass communication were having a strong effect on the residents who had little personal contact with non-whites. Hartmann and Husband sum up their research findings in the following manner: "It is clear that the press (and the news media

in general) have not merely reflected public consciousness on matters of race and colour but have played a significant part in shaping this consciousness."

In this connection, an article by T.A. Knopf (1970) on the subject of media myths is worth mentioning. By being inaccurate about race "riots" for example, many newspapers create an unnecessary and dangerous atmosphere of fear in the population. These media build up a vocabulary of their own, in which key phrases are repeated time and time again. Value-laden words receive unusual emphasis. The participants of such an event become "marauders" not men, they "rove" rather than run, they move in "gangs" not groups; and they engage in "vandalism" instead of violence, since the former implies senseless, random destruction. Knopf also points to the way a word such as "riot" is now applied to any small or large gathering where some destruction occurs. Its original meaning is by now totally obscured.* Knopf continues: "The effect of such treatment by the media is to pander to the public prejudice, reinforcing stereotypes, myths, and other outmoded beliefs. The media not only frighten the public but confuse it as well."

An interesting study by Singer (1970) looked at the effect of the media's reporting of violence on peoples' subsequent behavioural response to that violence. This researcher asked people, some of whom had been arrested for participating in a riot, (a) how they had heard about the riot and (b) whether they had passed along the information. It turned out that 51 per cent of those that had heard from television informed another person, while only 28 per cent of those who were actually present subsequently passed the word. Having seen the riot at first hand, people were less likely to communicate the event to others. Clearly the impact of watching a news program generated a different response. This may tell us something about the nature of vicarious participation. Most people would be physically and mentally repelled were they ever unfortunate enough to witness a murder at close quarters, yet the same individuals will eagerly tune into a violent television program expecting to see at least one or two murders per episode. Needless to say their expectations are seldom disappointed.

Although it is hard to say which of the various media is the most effective at changing our perceptions or attitudes, there is a study by W.H. Wilke (reported in Schramm, 1961) that attempted to compare some of them. In this study, identical material was presented in person, by a remote speaker, and in print to three different groups of people. The three methods of presentation were differentially effective in the order given here, print being the least able to modify the audience's attitudes.

*For a local example of the misuse of this word, see *The Toronto Sun* headline of September 7 in which a boisterous crowd of teenagers were described under the following headline: "Kiss Kids Riot".

Crime stories, especially violent ones, seem to figure prominently in many forms of the news media, but what direct experimental evidence do we have to support the notion that this is harmful to the audience? In a study by Hornstein et al. (1975), people were exposed to a news broadcast that reflected either the best or the worst aspects of human nature, depending upon the experimental condition to which the people were assigned. One broadcast described a man who, in a gesture of altruism, donated a kidney to a needy patient; the other story (the "bad" news condition) contained an account of a brutal case of murder. After being exposed to the broadcast, subjects had to participate in a matrix game where they were able to choose between cooperating or competing with a co-player, whom they could not see.

Subjects who had listened to the "good" news broadcast chose to play cooperatively and expected others to do the same more often than the subjects who had been exposed to the "bad" news bulletin. Thus, the news bulletin had the effect of changing their later behaviour, which in this case was an interaction with a total stranger. If the matrix-game behaviour is representative of everyday activity – and there are some who contend that it is not – then this is an example of the news media directly affecting people's interactions with others.

The same authors ran a subsequent experiment along the same lines, but this time instead of playing the matrix game the subjects were asked a series of questions that measured their opinions of other people. Those who listened to the "good" news broadcast were more inclined to believe that people in general are concerned about the well-being of their fellow man. In this subsequent experiment, people's attitudes towards others were significantly different after the news bulletins. These results become particularly salient, if one bears in mind the media's propensity for publicizing the shocking and the tragic at the expense of more altruistic actions. The former are almost universally regarded as more "newsworthy" than the latter.

The same authors ran another study, this time varying the amount of social information contained in the newscasts. Bulletins that contained non-social information (the events described were a result of natural phenomena) did not have an effect on later behaviour. An example from the "bad" news condition involving this type of information would be a description of a disastrous hurricane or earthquake. Newscasts that contained social information did have an effect on the subsequent behaviour of the subjects. It was the specifically human component of the broadcast information in this (and presumably the previous study) that was affecting perceptions of, and interactions with, total strangers. Hornstein and his colleagues also found a direct relationship between social outlook and behaviour. The former was also sensitive to incoming social information. This study shows, then, that infor-

mation from a news broadcast can affect an individual's subsequent behaviour as well as his perception of other people.

Veitch and Griffit (1976) employed a similar strategy, this time to measure emotions. Once again the subjects were exposed to one or the other type of newscast while "waiting" for the experimenter to arrive. Afterwards they were given an affect scale on which they could indicate their immediate emotions. They also rated a total stranger on a number of personality dimensions. The kind of broadcast significantly affected the subjects' responses to both scales. People who had listened to the "good" news broadcast felt happier (and also indicated that they would be more willing to work with the unidentified stranger) than the subjects who had received the "bad" news.

This study was also interesting because the newscasts did not contain items that dealt with individuals or even human events, but rather with general events such as food-price increases and medical-research grants. Even so, they still changed the listener's perception of another person who was a complete stranger. These two researchers conclude as follows: "It has been shown that stimulus conditions as ubiquitous and as seemingly benign as radio news broadcasts can produce profound effects on the ways we perceive and evaluate others."

There does seem to be a substantial collection of studies that confirm the intuitive hypothesis that the mass media have a significant effect on the way we perceive and respond to the world around us. Although the various forms of mass communication may work in different ways and with radically different results, they all contribute to the images we hold of other people and subsequently to the ways we use to govern our interactions with others. These studies have demonstrated the important role the media play in everyone's life. Returning to Schramm's statement with which this review began, we can begin to speak about media effects less tentatively than when he wrote that passage some years ago. The question has become not so much whether there are effects, but, more accurately, how strong they are. The vast majority of the population appears to employ the media to a large degree in forming its perceptions not just of remote events, but also of others very close to home. With regard to the issue of safety in the streets, people rely on the news media and the impression derived from television programs more than on personal experience, government statistics, or specialized publications. One extravagant story on a particularly vicious murder will probably affect more people's perceptions of homicide than any government report on the matter. Such is the power of the media.

If the professionals are divided, or at least not united, on the issue of media effects, the public seem to be more unanimous. In a Harris opinion poll reported in the July 10, 1967, issue of *Newsweek*, a cross-section of the American population was asked whether watching

television had made them more in favour of recalling troops from Vietnam. Newscasts throughout the war years, and even more so in the mid-Sixties, contained a great deal of gruesome coverage of the war. Seventy-three per cent of the respondents said that television had changed their opinion in favour of withdrawal. Only 11 per cent said that television had not altered their attitude towards the South-East Asia conflict. In a Gallup Poll published in *The Toronto Star* dated December 22, 1976, 67 per cent of the respondents believed that there was a growing tendency of the newspapers to sensationalize news. Such views, however, do not seem to be correlated with newspaper-buying or the behaviour of television viewers.

Thus, although the effects may differ from time to time and from situation to situation, all the foregoing studies suggest that the media alter a person's social perceptions as they pertain to violence and conflict. Furthermore, there is evidence that people are aware of this general effect and resent it.

C: Original Research

Study I:

Pre-Test Survey

The purpose of this initial study was to try to get some preliminary data on the various kinds of things that people in Toronto are afraid of. In addition, we were interested in looking at the relationship between their fears and their exposure to the media. In the survey, we did not even attempt to get what might be characterized as a random or representative sample of people living in Toronto (or Ontario, for that matter). Thus, when looking at the data, one should keep in mind that these data cannot be interpreted as one would interpret a survey using a proper sample.

However, notwithstanding that problem, one can quite reasonably look at the *relationship* between the questions asked on the questionnaire. Thus, one might want to see whether those in the sample who listened most to the radio were more (or less) afraid of certain kinds of dangers. Although a truly random sample might differ from the sample used here in the manner in which the respondents answered questions (for example, they might be more or less afraid of some part of the city), it seems unlikely to us that the relationship between two variables would differ very much were the sample changed rather dramatically.

In any case, although this survey is a pilot study, it does present some interesting questions, which are followed up in later studies.

Method

A 23-item questionnaire was drawn up. Generally speaking, the questions dealt with people's conceptions of how safe it was to engage in various activities. The questions varied somewhat in format: some of them required subjects to answer simply "yes" or "no"; others required subjects to answer questions on a four- or five-point scale; still others required the subjects to give their own answer (that is, no alternatives were provided).

Subjects were approached in a number of public locations: 22 were contacted at Nathan Phillips Square, 35 from the Queen's Park area, 20 from around the University of Toronto, and 23 from the intersection at Bathurst and St. Clair. In this way it was hoped to be able to gather a speedy but crude indication of some of

the public's opinions on the matters of question. Subjects were asked to answer the questions verbally, or, if they preferred, to fill out the questionnaire themselves. It should be noted that approximately half of those people who were approached refused to participate. Although this might be considered to be a problem if we were claiming to have a representative sample of people, it was not too important for our purposes. In any case, the final sample of people consisted of a rather heterogeneous group of 100 residents of Toronto. (For what it is worth, the reason that most people gave for refusing was that they were in a hurry. The interviewer was unable to tell whether this was, indeed, the real reason. However, given the fact that all of the people who were contacted were in places other than their homes, this refusal rate is not too surprising.)

The questionnaire took about ten minutes to complete for those who had it read to them and about 15 minutes for those who read it themselves. Most of the participants were quite interested in giving their opinions on the subject and frequently wanted to add more than was required on certain items. This was especially true for the items concerning the location of rapes and the need for more security precautions on the TTC. To the extent that this observation is one that can be generalized to the population at large, it would appear that crime and violence and safety precautions are matters that people do have some deal of concern about and about which they are happy to give their opinions.

Results and Discussion

The questions that were asked, and the proportion of people giving each response are listed below. The total number of respondents is 100.

1. Which of the following locations do you consider to be the most dangerous?
The subway (31 per cent)
Yonge Street (15 per cent)
A tavern (34 per cent)
Inside a bus (0 per cent)
At a football game (2 per cent)

High Park (18 per cent)
Clearly (if one assumes that the sampling in this survey was not too unrepresentative), the subway is seen as a rather dangerous place to be in. Given the facts, that there has been only one murder in the subway since it opened and that the TTC reports that there were very few assaults in the subway in 1975, it would appear that people's view of the subway is somewhat in conflict with reality.

2. How many murders were committed in Toronto last year? This was an open-ended question. The answers that people gave were categorized as follows:
Below 40 (26 per cent)
From 40 to 50 (31 per cent)
From 51 to 60 (11 per cent)
From 61 to 70 (2 per cent)
Over 70 (25 per cent)
Don't know (5 per cent)
It is clear that a substantial number of people over-estimated the number of murders that take place in Toronto in a year (in 1975 there were 48 murders).

3. Do you think that someone could be attacked outside an apartment building, in full view of many people, without somebody coming to help?
Yes (90 per cent)
No (9 per cent)
Don't know (1 per cent)
To the extent that this badly worded question gives us information (note that it doesn't mention the city of Toronto nor does it indicate anything about frequency), it would appear that the Kitty Genovese incident (involving a young woman who was killed while 38 witnesses watched from their New York City apartments and did nothing) is something that people feel could happen again.

4. Which age group is most likely to encounter some kind of violence?
In this question, no alternatives were given; however, the responses were categorized as follows:
Below 20 (56 per cent)
20 to 30 (29 per cent)
31 to 40 (3 per cent)
41 to 50 (4 per cent)
51 to 60 (0 per cent)
Over 60 (8 per cent)
It is clear that our respondents felt (properly, we believe) that the victims of violence tend to be young. Note that 85 per cent felt that the people most susceptible to being victims of violence are those under 30.

5. What are the chances, do you think, of your being attacked in the subway?
one in 100 (27 per cent)
one in 1000 (13 per cent)
one in 10,000 (19 per cent)
one in 100,000 (15 per cent)
one in 1,000,000 (26 per cent)
This confirms what we suspected (from Question 1, among other things) that the subway is seen as a very

dangerous place in Toronto. The TTC as a whole has about a million fares paid per day. Assuming that most people who ride the TTC ride it in two directions each day, there would be about half a million riders per day. A reasonable portion of these TTC patrons take the subway. Clearly, given the fact that there are so few assaults on the TTC, the estimate of one in a million is most likely to be correct. We find it rather dramatic that 40 per cent of our respondents felt that they had a one in a thousand (or better) chance of being attacked.

6. Supposing you were involved in a fight, do you think it would be with:
A relative (17 per cent)
An acquaintance (19 per cent)
A total stranger (59 per cent)
Don't know (5 per cent)
Once again, it would appear that people's view of who gets involved in fights is inconsistent with reality. Our understanding is that most fights are between people who have some knowledge of each other (that is, are relatives or acquaintances); very few are between people who don't know each other at all.

7. In what location do most rapes occur? There were no alternatives given to the subjects. Their responses were categorized as follows:
Parks (38 per cent)
Underground parking garages (10 per cent)
Dark alleys, unpopulated areas (24 per cent)
Victim's home (6 per cent)
Anywhere, or other locations (16 per cent)
Don't know (6 per cent)
The belief of most of our respondents, clearly, is that rape is a crime that occurs where the victim cannot get help, and, indeed, the respondents believed that rape seldom occurs in the home of the victim. Obviously, it is difficult (if not impossible) to know exactly where rapes do mostly occur, since apparently only a small proportion of rapes are actually reported. However, it does seem likely that people will over-estimate the likelihood of rape occurring in a public place.

8. How dangerous do you consider hitch-hiking?
Not at all (4 per cent)
Somewhat (34 per cent)
Fairly (37 per cent)
Extremely (23 per cent)
Don't know (2 per cent)
Hitch-hiking, it would appear, is seen by most people as being a fairly dangerous practice. This belief may be in part due to the publicity accorded to the view of North York's Mayor Lastman who during the summer of 1976 had a campaign against hitch-hiking.

9. Are there areas of Toronto that you regard as more dangerous than others? As it turned out, this was a very difficult question to code in any meaningful way. The results, as best they can be presented, are as follows:
Ontario Housing areas, slums (28 per cent)
Downtown (11 per cent)
Subway (6 per cent)

East end, and others (40 per cent)
No special areas (12 per cent)
Don't know (3 per cent)

10. In your opinion, what kind of person is most likely to be the object of a violent assault? No alternatives were given. The coded results are as follows:
Members of a racial minority group (14 per cent)
Drunks (11 per cent)
Girls (21 per cent)
The elderly and the weak (15 per cent)
Youths, punks, and others (16 per cent)
Don't know (23 per cent)

11. Do you consider it necessary to keep your apartment or house locked at all times?
Yes (69 per cent)
No (30 per cent)
No response (1 per cent)

12. Of the following, which one is most likely to encounter some form of violence in his or her job?
Bus driver (1 per cent)
Cab driver (53 per cent)
Tavern waiter (41 per cent)
Security guard (4 per cent)
Don't know (1 per cent)
Obviously, cab drivers are seen as being particularly vulnerable. Independent of the truth of the matter, it is possible (though we don't know for sure) that this perception is, in part, due to the publicity given just before the survey to incidents involving attacks on cab drivers.

13. Do you think there should be more security precautions on the TTC?
Yes (72 per cent)
No (28 per cent)

14. In general, do you think women are more often the victims of violence?
Yes (70 per cent)
No (29 per cent)
Don't know (1 per cent)
We suspect that men are more likely to be the victims of violence, though obviously this would depend, somewhat, on one's definition of violence. We would speculate that the reason that women are seen to be more likely to be victims is that crimes involving women as victim (for example, rape) are more likely to be publicized and remembered.

15. Are fights more likely to occur on the street or in taverns?
Street (37 per cent)
Taverns (60 per cent)
Don't know (3 per cent)

16. Which of the following groups is most responsible for violent crimes?
Delinquent youths (52 per cent)
Professional criminals (2 per cent)
Motorcycle gangs (5 per cent)
People previously convicted of murder (5 per cent)
Psychotics (33 per cent)

Don't know (3 per cent)
Probably the most interesting finding is that a third of the respondents thought that psychotics were responsible for most of the violent crime. It is hard to know where they got this idea, unless it is from the large amounts of publicity given to crimes involving those with a history of involvement with the psychiatric establishment.

17. Of all the homicide victims in Toronto last year, what percentage would you suppose were related to their killers? Alternatives were not given. However, the coded responses were as follows:
0 to 30 per cent (25 per cent of the respondents)
31 to 50 (27 per cent)
51 to 60 (15 per cent)
61 to 70 (11 per cent)
71 to 100 (17 per cent)
Don't know (5 per cent)

18. Compared to ten years ago, how safe do you feel it is to live in Toronto now?
Much safer now (1 per cent)
Somewhat safer now (2 per cent)
About the same (22 per cent)
Somewhat less safe now (39 per cent)
Much less safe now (35 per cent)
Don't know (1 per cent)

19. Are there areas near you that you consider unsafe to walk home in at night?
Yes (60 per cent)
No (39 per cent)
Don't know (1 per cent)
For a city with a reputation for being reasonably safe, this seemed to us to be a high proportion of "yes" answers. The question is, therefore, included (in slightly altered form) in the formal survey (see below).

20. Do you read a newspaper regularly?
Yes (85 per cent)
No (15 per cent)

21. Do you watch the local news on television?
Everyday (24 per cent)
Occasionally (16 per cent)
Frequently (38 per cent)
Almost never (22 per cent)

22. Name the television programs you are most likely to watch in a typical week?
The question, in this form, turned out to be just about impossible to code. For that reason, we went through extensive pre-testing for the formal survey.

23. How often do you listen to the news on the radio?
Everyday (46 per cent)
Frequently (26 per cent)
Occasionally (19 per cent)
Never (8 per cent)
No response (1 per cent)

General Conclusions from This Survey

It seems to us that there are a number of things that can tentatively be concluded from these frequencies. In the

first place, location of crimes (especially the subway) seems to be a question that is worth looking at in more detail. Secondly, it does seem that these respondents had a generally high level of fear of crime. They tended to keep their doors locked; they reported avoiding certain areas at night; they felt that hitch-hiking was a dangerous thing to do; they felt that women were vulnerable to attack. Furthermore, they felt that one couldn't necessarily rely on one's neighbours for help. Finally, strangers more than acquaintances were the objects of fear.

In addition to these tabulations of the data, a number of cross-tabulations of the data were performed. Treating question 21 ("Do you watch the local news on television?"), 20 ("Do you read a newspaper regularly?"), and 23 ("How often do you listen to the news on the radio?") as independent variables, each of these three variables was cross-tabulated with each of the following ten questions:

2. How many murders were committed in Toronto last year?

5. What are the chances, do you think, of your being attacked in the subway?

6. Supposing you were involved in a fight, do you think it would be with a relative, an acquaintance, or a total stranger?

7. In what location do most rapes occur?

11. Do you consider it necessary to keep your apartment or house locked at all times?

13. Do you believe there should be more security precautions on the TTC?

16. Which of the following groups are most responsible for violent crimes?

17. Of all the homicides in Toronto last year, what percentage were related to their killers?

18. Compared to ten years ago, how safe do you feel it is to live in Toronto now?

19. Are there areas near you that you consider unsafe to walk home in at night?

Of the 30 cross-tabulations that resulted from these analyses, only one was significant. Although it is presented below, it should be remembered that one would expect at least one to be significant completely by chance. Thus, unless this effect is replicated, it should not be accepted with too much confidence.

If this single finding is to be accepted (and it is likely that it is chance alone that is causing the effect), then it would appear that those who watch television news are more likely to see themselves as possible victims of assault on the subway.

The sex of the respondent (56 males and 44 females) was cross-tabulated with question 5, 7, and 13. None of these relationships were significant.

		Question 5. Chances of a subway assault:	
		1/10,000 or more	1/100,000 or 1/1,000,000
Do you watch local television news?	Everyday or frequently	42	20
	Occasionally or never	17	21
		Chi square: 5.16, $p < .05$	

The Effects of Variations in Stranger/Acquaintance and Location: Print News

The purpose of this study was to try to manipulate the details of two different stories involving crime to see if various factors in the stories affected people's views of the general phenomena that they were dealing with. Thus, for example, in one set of stories, a rape was described and the location of the rape was either specified or not; in addition, the relationship of the victim to the assailant was varied. In the other set of stories, an assault was described as being carried out by a stranger or a person known to the victim. Similarly, details of the assault were given as including the actual location, or these details were excluded.

The complete design of the experiment included eight experimental conditions. Each respondent (in all of the conditions) was asked to answer the same questionnaire. Because it is clearer to present only the data relevant to the study, we have split up the study into its two major components corresponding to the two sets of stories. The complete list of experimental conditions (that is, critical stories) is as follows:

1. A rape was described as having taken place in a park. The assailant was apparently a complete stranger to the victim. The story included a statement from the police telling the reader that rapes rarely occur between complete strangers and do not normally occur in public places.

2. In this condition, the rape took place in the victim's apartment and the assailant was known to the victim.

3. In this condition, the rape took place in a park, but the assailant was known to the victim.

4. The same as in condition "1" except that the police statement was omitted.

5. An assault (leading to death) was described as having been carried out by a stranger. Details of the location (Broadview and Gerrard area) were given.

6. The same assault was described as having been carried out by a relative of the victim. Location details were not given.

7. The same assault was described as having been carried out by a stranger. Location details were not given.

8. A control condition, where none of the above

stories was given. Only "filler" (non-violent) stories were included.

All of the stories were typed in newspaper-style brief paragraphs for presentation to the subjects. None of the subjects seemed to doubt that they were real stories from newspapers, though they assumed, we would imagine, that they might have been edited.

Subjects were 160 volunteers from various public places around Toronto (for example, the Toronto-Dominion Centre, Nathan Phillips Square, parks, et cetera). They were asked to read a set of stories (five for half of the subjects in each condition, three for the other half). One of the stories was the key experimental story (except in the control group). The reason that the number varied was that the first 80 subjects seemed to feel that we were imposing too much on them in asking them to read so many stories.

The results of the study on rape are as follows:

Condition	Rape victim likely to be stranger to assailant (High = stranger)	Where rape occurs (High = public place)
1. Rape in park by stranger— police statement	2.60	3.05
2. Rape in apartment— rapist known	2.40	2.60
3. Rape in park— rapist known	2.75	3.00
4. Rape in park by stranger (no statement)	2.95	3.35
8. Control	2.40	2.85

It appears from these data that we were not successful in changing people's opinions about either the nature of rape or about the location in which it takes place. There are no significant differences on either question.

The results of the other study are more difficult to

analyze because our location question (unfortunately) dealt with the dangerousness of a particular location (Broadview and Gerrard) and a substantial number of people did not feel that they could answer a question dealing with that location. We have, however, listed the results for this question and included in parentheses the number of people who answered this question (of the 20 in each condition).

	Condition	How dangerous do you think the area of Broadview and Gerrard is? (High = safe)	Per cent feeling that victims of serious assaults are more likely to be total strangers to their attackers
5.	Mugging by stranger—location given	3.0 (14)	50
6.	Mugging by relatives—no location given	3.0 (15)	70
7.	Mugging by stranger—no location	2.88 (16)	55
8.	Control	3.4 (15)	60

Once again, it would appear that we were not successful in changing people's views about either the dangerousness of a particular area in Toronto or in dealing with the general question of the nature of the victim-assailant relationship. None of the differences were statistically significant.

The Effects of Variations in the Location of a Crime and the Relationship of Victim to Assailant with Group Discussion: Print News

The purpose of this study was to try to see if the effects that were looked at in the previous study would be affected by a group discussion after people had been exposed to the written material involving violence.

Subjects for this experiment were gathered from the public attending the Ontario Science Centre. Volunteers came in response to a blackboard notice requesting subjects for a psychology experiment run in conjunction with the University of Toronto. They were given a booklet of newspaper stories to read and then were asked to discuss the stories among themselves in groups of four. After exchanging opinions and ideas, they submitted specific recommendations designed to prevent the incident from recurring. These recommendations were recorded by the experimenter who was present during, but did not participate directly in, the discussion. At the conclusion of the recommendations the subjects filled out the questionnaire, which contained items pertaining to violence in the city. When the subjects had completed this, they were given a brief description of the purpose of the study.

There were four conditions to which the groups were randomly assigned. In the first, there were two filler stories plus one describing an apartment rape by

someone known to the victim; the second contained a story about a park rape by a similar assailant; and in the third, a park rape occurred in which the rapist was a total stranger. In addition there was a control group which received only the two filler stories.

The entire procedure took between 15 and 20 minutes, of which from six to 11 minutes was spent discussing the stories. Five groups of four subjects were run for each condition, with the exception of one group for the third condition and four groups for the first condition which contained five members. Usually the volunteers came in groups; when they did arrive singly or in pairs, they were requested to wait for others until the group was complete. Naturally, the groups were run separately. A total of 85 individuals participated in this experiment.

There were three questions that were relevant to these experimental conditions, and the data for the four conditions for each of the questions is listed below. It should be noted that because the groups interacted and because it was *groups* of subjects that were randomly assigned to experimental conditions rather than *individuals*, the group for each question was used as the unit of statistical analyses.

	What per cent of rape victims are total strangers to their assailants? 1 = 0–20% 5 = 81–100%	Where does rape take place? 1 = home 5 = public place	Are victims of assaults 1 = known 5 = strangers to their assailants?
Conditions			
1. Rape in apartment— not a stranger	3.26	2.46	2.94
2. Rape in park— not a stranger	3.18	3.30	3.05
3. Rape in park by stranger	3.14	2.85	2.12
4. Control stories only	2.75	3.15	2.40

Clearly, there is an apparent paradoxical effect on the first and third questions. However, none of the effects on these questions approached statistical significance.

On the second question, the results seemed to be more orderly and, in addition, the difference between the first and second conditions approached significance in this case ($F(1,16) = 3.64$; $p < .10$).* Thus, it would appear that there was a trend towards seeing public places as more frequent locations of rape after having read about one taking place in a park (as compared to hearing the same story with the location of the crime changed to the victim's apartment).

*The F score is a standard measure of statistical significance. The p value indicates the likelihood that the observed differences among conditions occurred merely by chance.

Study IV:

The Effects of Variations in the Location of a Crime and the Relationship of Victim to Assailant with Group Discussion: Print News (Replication of Study III)

Because of the suggestive effects of the previous experiment, it was replicated. The only difference was that there were four groups of subjects in each condition, and each group contained four subjects. Hence, a total of 64 individuals were run. The data are listed below:

		What per cent of rape victims are total strangers to their assailants? 1 = 0–20% 5 = 81–100% (Question 1)	Where does rape take place? 1 = home 5 = public place (Question 2)	Are victims of assaults 1 = known 5 = strangers to their assailants? (Question 3)
	Conditions			
1.	Rape in apartment—not a stranger	3.75	3.13	1.70
2.	Rape in park—not a stranger	3.00	3.20	1.40
3.	Rape in park by stranger	2.70	2.95	1.53
4.	Control stories only	3.20	2.70	1.55

It is clear that the pattern from the previous experiment was not replicated. It will be recalled that there was (in Study III) a rather large difference between the first two conditions on the "location" question. In this study, the "location" question did not appear to be at all sensitive to the manipulation.

For ease of understanding, the combined results of this and the previous study are presented in the table below.

It would appear, therefore, when the combined data from all nine groups in each of the four experimental conditions are looked at, that the manipulations did not have much of an effect. The largest difference between any two experimental conditions on any of the three questions is only about half of a scale point (on a five-point scale). Group discussions, at least as we operationalized them, did not appear to strengthen our results.

Conditions	Question 1	Question 2	Question 3
1.	3.48	2.76	2.39
2.	3.10	3.26	2.32
3.	2.94	2.89	1.86
4.	2.95	2.95	2.02

Study V:

The Effect of Variation in the Relationship of Victim to Assailant: Print News

The major purpose of this study was to attempt to manipulate the "stranger-known" assailant variable using a more typical kind of crime. Hence, in this study an assault was described (the headline was "Metro Man Victim of Senseless Attack" in the "stranger" condition), as it was thought that this kind of crime might be more likely to be affected by manipulations of the kind we have been doing. There were four conditions:

1. A beating was described as having been done by strangers in a park.

2. The same event (by strangers) was described as having taken place in the driveway of the victim.

3. The beating was done by some nephews of the victim in his driveway.

4. Control: Subjects didn't read the "critical" story.

They read some control stories and answered the same questions as the experimental subjects.

The subjects were all visitors to the Ontario Science Centre who volunteered to participate in the experiment, which took about ten minutes of their time. They were randomly assigned to experimental conditions such that there were 21 subjects in the first two conditions and 20 in each of the other two conditions. There were three critical questions dealing with the variable under study. The first of these questions was directly related to the focus of the study. The second dealt with the subjects' perception of their own relative vulnerability to attack from strangers or acquaintances. The third dealt with the subjects' estimates of the proportion of murders committed by relatives or acquaintances of the victim.

	Condition	Per cent of assault victims who are strangers to assailants: 1 = 0–20% 5 = 81–100%	Subject more likely harmed by known person or complete stranger: 1 = more likely stranger 5 = more likely acquaintance	Per cent of murderers related to their victims: 1 = 0–20% 5 = 81–100%
1.	Beating by strangers in park	2.95	2.61	2.76
2.	Beating by strangers in driveway	2.71	2.80	3.14
3.	Beating by relatives in driveway	2.25	3.15	3.00
4.	Control	1.85	2.65	3.30

It is clear that the first question noted above showed dramatic effects arising from the experimental manipulations. Indeed, there was a significant effect of the manipulations ($F(3, 78) = 3.57; p < .05$). The two conditions involving beatings by strangers created beliefs in the readers of these stories that assaults are more likely to be carried out by strangers.

The other two questions did not show significant differences, perhaps because they were less directly related to the actual manipulations.

Study VI:

The Effect of Variations in Location of a Crime: Print News

In this study, the location of an assault was varied. One group had a print news story which described an assault that took place in the victim's driveway. The second group read the identical story except that the assault was described as having taken place in a park. The third group did not read of an assault. All three groups also read a control story (dealing with a subway fire). Subjects were then asked to answer a nine-item questionnaire, three questions of which dealt directly with the question of the location of crimes.

The results for the three critical questions are listed below:

		Should parks be closed at night to reduce crime? 1 = yes 5 = no	Where do assaults take place? 1 = parks 5 = home	How dangerous are Toronto's parks? 1 = dangerous 5 = safe
	Conditions			
1.	Beating in driveway	3.47	3.24	3.43
2.	Beating in park	3.47	2.85	2.85
3.	Control	3.19	2.95	2.95

First of all, it is clear that the first of these questions was not affected by the manipulation. This is not too surprising, since it assumed two things: that the stories affected the perception of the likelihood of crime in parks and that closing the parks would be a good way of dealing with the kind of crime described in the newspaper story.

The second and third questions dealt more directly with the actual manipulations in the study. It is clear that there is a trend towards assuming that parks are a more dangerous place after reading about a beating that took place in a park. Because these two questions deal with the same factor, they were combined into a single index and a one-way (three-condition) analysis of variance was performed on the data. Although the overall analysis was not significant ($F(2, 60) = 1.76$), the difference between the two experimental conditions ("1" and "2" above) approached significance ($F(1, 60) = 3.16, p < .10$).

Study VII:

The Effect of Authoritative Information Concerning
Victim-Assailant Relationship: Print News

In this experiment, an attempt was made to simulate the putting of a particular crime into a meaningful context. Many reports of crimes are simply just that: a statement of an event. Since it is clear that only a small proportion of crime is given much prominence in the media, it is important to know how the events that are reported compare to the full range of crime. If only the unusual crimes get reported, it is not surprising that people might get a distorted view of what is going on.

In the newspaper stories that our subjects read in this study, then, there was (in the two experimental conditions) a report of an unsolved murder. In one case, there was simply a statement of the fact that the murder took place and that the police were still investigating. In the second case, there was a statement that pointed out that it is uncommon, in Toronto and elsewhere, for a murder to be committed by a person unknown to the victim. These two stories were, in fact, slight variations on two stories that had appeared (separately) in the newspapers in Toronto.

There were three questions that dealt directly with the theme of the stories:

(a) What percentage of assault victims are total strangers to their assailants? 1 = 0-20 per cent . . . 5 = 81-100 per cent

(b) Would you imagine that you personally would be more likely to be seriously harmed by someone you knew previously or by a complete stranger? 1 = stranger . . . 5 = previously known person

(c) Of the 48 murders in Metropolitan Toronto last year, what percentage do you suppose were known, related, or married to their killers? 1 = 0-20 per cent . . . 5 = 81-100 per cent

Sixty-three subjects (21 per condition) participated in the experiment.

	Conditions	Per cent of assault victims who are strangers 1 = 0–20% 5 = 81–100% (Question a)	Harmed personally by stranger or acquaintance 1 = stranger 5 = acquaintance (Question b)	Proportion of murderers related to their victims 1 = 0–20% 5 = 81–100% (Question c)
1.	Unsolved murder	2.48	2.00	3.19
2.	Unsolved murder with police explanation	1.57	3.33	3.33
3.	Control	3.05	2.10	3.29

Questions (a) and (b) both showed significant differences: ($F(2, 60) = 6.88$ for Question (a), and $F(2, 60) = 5.93$ for Question (b); $p < .01$ in both cases): Where the police officer gave information about the "typical" murder, people were dramatically affected by the information. Given that crime is one of the most "popular" things to read in a newspaper, this would suggest that if a newspaper were interested in educating the public on the nature of crime, it would be a fairly straightforward task to do so, and would not involve any massive changes in editorial policy.

Because this experiment was run at the same time as the previous one, we were able to use the same control group for the two studies.

Study VIII:

The Effect of Variation in the Relationship of Victim to Assailant: Radio News

This study dealt with radio broadcasts as stimuli. There were two experimental conditions – an assault by a stranger and an assault by someone known to the victim – and a control group. The design and stories used were similar to the design and stories in the studies using printed material (Study V) except, of course, that the subjects listened to a professionally written and read (simulated) news broadcast which was tape-recorded and played to them on a cassette recorder through earphones. They then filled out a questionnaire that had three questions relevant to whether serious assaults are likely to be carried out by acquaintances of the victim or by complete strangers. These three questions were summed to create a single index. The data are listed below.

	Conditions	Assaults are more likely to be carried out by strangers. High crimes are by strangers
1.	Assault by strangers	10.11
2.	Assault by relatives of the victim	10.29
3.	Control	8.61

There were 28 subjects in each of the three conditions for a total of eighty-four. The over-all analysis of variance was significant ($F(2, 81) = 4.62$; $p < .01$) It is clear that *both* stories made people more likely to believe that crimes are more likely to be carried out by strangers than they were if they heard nothing about the existence of an assault (control condition). It is not clear to us why this is the case.

The Effect of Authoritative Information Concerning Victim-Assailant Relationship: Radio News

This study also looked at the effects of radio broadcasts, but this time dealt with the effect of putting a crime in the context of other crimes. In the middle of a broadcast, a murder was described that had taken place apparently without motive and that was committed, presumably, by strangers to the victim. In one condition, this was followed by a section on the actual incidence of such homicides; in the other experimental condition, the event was not put into this context. In addition, there was a control group (actually the same people as in the previous experiment, since the two experiments were run at the same time) who heard a simulated radio news broadcast, but heard nothing on it about a murder. The subjects listened to the professionally produced, simulated news broadcast (using the same story line as in Study VII) over earphones (connected to cassette-tape players) and then answered questions concerning the likely incidence of stranger-to-stranger crimes. The results are listed below. The basic data are a combination of the answers to three questions.

	Conditions	Assaults are more likely to be carried out by strangers. High crimes are by strangers
1.	Murder without context	9.27
2.	Murder with explanation of its being unusual	5.90
3.	Control	8.61

There were 30 subjects in each of the experimental groups and 28 in the control condition for a total of eighty-eight. Once again, there are dramatic effects from the "context" information. Whereas the straight description of the murder (by strangers) tended to make people slightly more likely to feel that murders were typically committed by strangers than in the control condition, there was a dramatic drop with the addition of the authoritative information.

Study X:

The Effect of Authoritative Information Concerning Victim-Assailant Relationship: Television News

This experiment was essentially a replication of Study IX except that professionally produced television news broadcasts were used as the stimulus materials. As in the previous study, there were three conditions:

1. In one condition, the critical story described a beating death (in Toronto) which had taken place, apparently, as a result of a fight between two previously unacquainted people.

2. In this condition, the same story as (1) was used, except that there was, in addition, a statement attributed to a police officer indicating the fact that such stranger-to-stranger crimes are relatively rare.

3. In the control condition, people watched a news broadcast that was identical to the ones used in the first two conditions except that the critical story was omitted.

The stimulus materials for the experiment were produced by CITY-TV with the use of their regular newscaster. From our perspective, all of the broadcasts looked exactly like CITY's normal newscasts. None of the subjects in the experiment expressed any doubt about the authenticity of any of the stories.

Subjects in the experiment were volunteers from the visitors to the Ontario Science Centre. Subjects were run in groups of from two to eight persons and were asked to watch the news broadcast, which lasted about five minutes. Those participating were asked not to communicate with other members of the group either during or after the broadcast. When they had finished watching the broadcast, they were given a seven-item questionnaire with three critical questions on it. At the end of the experiment, as with all of the experiments run on this project, all of the subjects were given a full explanation of the purpose and design of the experiment. Thirty subjects were run in each of the three conditions for a total of ninety. The three critical question ("What percentage of assault victims are total strangers to their assailants?"; "Would you imagine that you personally would be more likely to be seriously harmed by someone you knew previously or by a complete stranger?"; and "Of the 48 murders in Metropolitan Toronto last year what percentage do you

suppose were known, related, or married to their killers?") were combined to form one index where high numbers mean strangers are more likely to do murders. The results for the three conditions are listed below.

Story only:	3.17
Story with statement about rarity of this kind of crime:	.33
Control:	2.0

The over-all analysis of variance was highly significant ($F(2, 87) = 15.44, p < .01$). Clearly most of the between-group variance is taken up by the contrast between the control and the second condition ($F(1, 87) = 13.24, p < .01$). The contrast between the control and the first condition was not significant ($F(1, 87) = 3.31, p < .10$).

Because subjects were assigned to condition in groups, it could be argued that the mean of each group should be used as the replicate in the analysis of variance. Therefore, these data were analyzed in that way. The over-all analysis was almost identical ($F(2, 18) = 12.46, p < .01$) and the results of the two contrasts were also very similar.

As with the previous experiment, there was a slight (but non-significant) tendency for people to assume, after reading about a murder, that all murders are more likely to be done by strangers. When given the authoritative information, people are clearly dramatically affected by the information.

Television Viewing and the Perception of Frequency of Violence: A Survey

Gerbner, along with various associates, has completed a number of studies that demonstrate convincingly that persons who view a lot of television tend to over-estimate the incidence of violent crimes. Gerbner has attributed these misperceptions to the fact that television programs, in general, contain a lot of violence, and that viewing violent programs causes people to over-estimate the incidence of physical violence around them. Gerbner's conclusions may be valid, but for them to be so requires the granting of two assumptions. The first of these, is that high television viewing necessarily results in high violent-television viewing. The second of these is that the amount of television-viewing or of violent-television viewing is unrelated to the actual incidence of violence in the viewer's immediate environment. The first of the assumptions is not too difficult to grant. The second, however, is far more questionable. There is no doubt that violence tends to be high in low socio-economic neighbourhoods, and it is equally true that there are culturally based television-viewing habits.

The present study was undertaken, therefore, to test the foregoing assumptions. If they are upheld, then more evidence can be given for Gerbner's conclusions. If not, then it might be safely assumed that viewing habits and the perception of the incidence of violence do not exist as a simple causal relationship. Rather, there are some further complications, which might involve the realities of violence in the viewer's immediate environment and values of the subculture to which the viewer belongs.

In general, the study consisted of determining areas of the Metropolitan Toronto region that had a high incidence of crime involving woundings and assaults and areas that had a low incidence of such offences. The total television-viewing habits of samples of residents of the designated areas were then determined, together with their views on the incidence and seriousness of crime in their environment.

Method

Statistics on the number of woundings and assaults in various areas of Metropolitan Toronto were obtained from the Metropolitan Toronto Police. Since these figures were available only for police patrol areas, the geographic unit for the purpose of the study was a police patrol area. These in turn vary in size according to the amount of work a patrol car might be expected to have and are not perfectly related to population. On the basis of considerations such as these and the actual number of woundings and assaults reported by the police, four areas, approximately equal in geographic size, were selected for study. Two of these were in the city proper: One, designated *"Low Crime, City"*, had reports of no assaults or woundings in a seven-month period. Another, designated *"High Crime, City"*, had reports of approximately 30 assaults and woundings per patrol area in the same seven-month period. Two suburban areas were also investigated: One of those, designated *"High Crime, Suburbs"*, reported 30 woundings and assaults, in seven months. The other, designated *"Low Crime, Suburbs"*, had reports of no such crimes in the same period.

Following the selection of these four areas, samples of individuals were selected for study. First, a random selection of households was determined by Creative Research Inc. using Statistics Canada blocks. Subsequently, interviewers selected adult individuals within those households for interview by means of a table of random numbers.

The interview consisted first of the respondent's indicating on a television schedule the television programs he or she had watched during the previous week and then completing a questionnaire consisting of 37 questions pertaining to the incidence of crime, attitudes towards crime, et cetera.

For purposes of analysis, prior to tabulating the results, a research associate designated each television program in the schedule as being one of the following: news, violent entertainment, non-violent entertainment, or sports.

Results

A total of 408 people were interviewed. The television-viewing responses were tabulated for each area and the mean number of programs viewed during one week are

shown in Table 1. As can be seen from the table, there are clear differences between the areas in terms of the total number of programs viewed, the number of programs viewed that involved violence, and the number of newscasts viewed. These differences were tested using one-way analyses of variance. For total television watched, $F = 11.6$, df 3/404, $p < .001$. For television violence, $F = 17.6$, df 3/404, $p < .001$. For television news, $F = .95$, df 3/404, $p > .10$. Thus, both total television- and television-violence viewing show significant variation among the four areas. An examination of the data clearly indicates that the amount of television and violent-television watching are positively related to the actual incidence of crimes against persons: People in high-crime areas watch more television (and also, as a result, watch more television violence).

Table 1

Mean Number of Programs watched by Groups and by Categories

	High Crime		Low Crime	
	City	Suburbs	City	Suburbs
Total television	36.25	31.71	18.89	25.03
Television violence	6.97	3.73	2.11	3.33
Television news	3.07	3.07	3.72	3.74

Numbers refer to the average number of programs of each type watched by respondents in each neighbourhood.

The questionnaire responses were examined as individual questions and also in terms of group questions, which were grouped on the basis of their apparent commonality of content. The groups were designated as indices 1 through 9 and were made up of questions as follows:

Index 1 = Q1, Q2, Q3, Q4, Q6, Q7. (Chances of being involved in crime in neighbourhood.)
Index 2 = Q5, Q26, Q27. (Perceived danger in subway.)
Index 3 = Q8, Q9. (Fear of being out at night.)
Index 4 = Q11, Q12. (Danger in hitch-hiking.)
Index 5 = Q13, Q14, Q15. (Police powers sufficient.)
Index 6 = Q18, Q19. (Keep home locked.)
Index 7 = Q17, Q20. (Arm oneself.)
Index 8 = Q23, Q24. (Racial crimes.)
Index 9 = Q30, Q31, Q32, Q33, Q34. (Willingness of people to help when needed.)

Not surprisingly, the four samples also varied in their over-all perception of these crime-related questions. We have listed in Table 2 the significant differences that existed on the various indices described above. Obviously, there were a large number of other individual questions that showed significant effects; we have not reported them simply to save space.

The other indices did not show significant variation among the four neighbourhoods that were sampled. From these indices, however, there are a few very notable findings. First of all, not surprisingly, people who live in high-crime areas of the city are more likely to view their neighbourhood as dangerous than are people in low-crime areas (Index 1). Interestingly enough, one finds this same pattern of results on the questions dealing with the subway: people who live in high-crime areas see the subway as more dangerous

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Table 2

	High Crime		Low Crime	
	City	Suburb	City	Suburb
Index 1: Perceived chance of being involved in crime in one's neighbourhood (High = safe)	19.4	20.6	25.9	23.6
	Over all F(3, 404) = 16.84, $p < .01$ High- versus low-crime areas: $t = 6.20$, $p < .01$			
Index 2: Perceived danger of subways (High = subway safe)	–3.5	–2.5	–1.9	–2.3
	Over all F(3, 404) = 3.18, $p < .05$ High- versus low-crime areas: $t = 2.19$			
Index 4: Danger in hitch-hiking (High = safe)	4.29	3.20	3.42	3.12
	Over all F(3, 404) = 6.09, $p < .01$ High- versus low-crime areas: $t = 2.09$			
Index 7: Should people arm themselves? (High = people should *not* arm themselves)	6.39	7.48	8.25	7.41
	Over all $F(3, 404) = 12.03$, $p < .01$ High- versus low-crime areas: $t = 3.71$			

than do people in low-crime areas (Index 2). Surprisingly, people in high-crime areas see hitch-hiking as safer than do people in low-crime areas (Index 4). Finally, people in the downtown high-crime area are most likely and people in the city low-crime area least likely to feel that people should arm themselves (Index 7).

Aside from the intrinsic interest of these findings, they are important because they begin to suggest that the Gerbner findings (people who watch a lot of television are more likely to see the world as violent) may be an artifact of the fact that people who watch a

lot of television *live* in violent parts of the city. At this point, then, we have established that people in high-crime areas watch a lot of television and view their world as violent.

The next logical step is to look at the data in a manner analogous to the Gerbner approach (ignoring the variable of neighbourhood). In Table 3, then, we have reported the correlations between the indices described above and the various measures of media usage. In this first table, we have contained the data from all subjects in all of the four areas of the city that were sampled.

Table 3

	Index 1[3] Neighbourhood Violence	Index 2[3] Subway Danger	Index 3[3] Fear Alone at Night	Index 4[3] Danger Hitch-Hiking	Index 5[4] Police Powers	Index 6[5] Home Kept Locked	Index 7[6] Arm Oneself	Index 8[7] Racial Crimes	Index 9[8] Help People If Needed
Total television[1]	−.12*	−.08	−.10*	−.07	−.03	−.02	−.30*	−.03	+.03
Television violence[1]	−.18*	−.05	−.02	−.04	−.07	−.05	−.25*	−.01	−.02
Television news[1]	+.07	−.06	−.05	−.12*	0	0	−.02	−.06	+.08
Radio news	−.06	−.04	−.09*	+.12*	0	+.06	−.03	+.01	+.04
Newspaper Reading	−.07	−.10*	−.01	+.05	+.02	−.03	−.06	−.03	+.07

Notes:
1 = number of programs
2 = high numbers = less exposure
3 = high = safe
4 = high = powers sufficient (safe)
5 = high = don't lock (safe)
6 = high = don't arm (safe)
7 = high = crimes involve race
8 = high = people won't help
*$p < .05$

At first glance, these data would appear to support the Gerbner hypothesis. When one looks at Index 1, for example, it would appear that those who watch a lot of television (or a lot of violence on television) tend to feel less safe in their neighbourhoods. Similarly, the more television a person watches, the more afraid he or she is of being alone on the street at night (Index 3). Similarly, it is the watchers of television (or television violence) who feel that people should be armed (Index 7).

This pattern of results becomes less clear, however, when one looks at the correlations for the high- and low-crime areas separately (see Table 4). Where originally there were significant correlations for indices 1, 3,

and 7 (with total television viewing), when one separates the high from the low-crime-area respondents, the correlations drop to approximately zero for Index 1 (perceptions of violence in the neighbourhood). This indicates that what we suspected from the examination of differences among the areas turned out to be true. High-crime-area people see their neighbourhoods as more dangerous (which they are) and also watch more television (and television violence). However, within areas, there is no relationship. It would appear, therefore, that the original over-all relationship is probably an artifact of these two critical differences between the high- and low-crime areas.

Table 4

	Index 1	Index 2	Index 3	Index 4	Index 5	Index 6	Index 7	Index 8	Index 9
Total television	− .05	− .08	− .10	− .16*	0	− .01	− .26*	+.02	− .03
	− .03	0	− .10	− .01	− .10	+.01	− .24*	− .07	− .11
Television violence	− .15*	− .03	− .03	− .12*	− .05	− .02	− .21*	0	− .09
	− .05	0	0	+.05	− .16*	− .05	− .23*	0	+.07
Television news	+.06	+.02	− .02	− .18*	+.04	0	− .02	0	+.02
	+.02	+.09	− .09	− .03	− .05	− .02	− .06	− .12*	+.18*
Radio news	− .02	− .05	+.14*	+.13*	− .03	0	0	.04	+.10
	− .01	0	+.02	+.06	+.04	+.16*	+.01	0	− .08
Newspaper reading	− .07	− .14*	− .04	+.03	− .03	− .15*	+.06	.07	+.11
	+.02	− .02	+.03	+.04	+.06	+.11	− .17*	− .13*	0

Top numbers = correlation from the high-crime areas (pooled)
Lower numbers = correlation from the low-crime areas (pooled)
*Statistically significant, $p < .05$

Although not significant (because of the lower number of observations in each of the separate correlations), the relationship between total television and the fear of venturing out at night (Index 3) is the same for the two sets of areas taken separately.

Similarly, there still exist correlations between the amount of television-viewing (or television-violence-viewing) and people's attitudes about arming themselves (Index 7).

Clearly the next step is to look at the four areas individually. Because our interest has now focused exclusively on three indices (1, 3, and 7), the data are presented only for these three indices (see Table 5).

Table 5

	Index 1		Index 3		Index 7		The four correlations within each cell are arranged as follows:	
Total television	−.04	.08	−.17*	−.17*	−.26*	−.25*	High-crime city	Low-crime city
	−.04	+.10	−.01	+.06	−.25	−.17†	High-crime suburbs	Low-crime suburbs
Television violence	.19*	−.14	−.13	−.12	−.20*	−.09	* = p < .05	
	+.04	+.10	+.14	−.14	−.10	−.34*	† = p = .06	

Looking at the data divided up by individual areas, then, there are still no consistent relationships between television-viewing and Index 1 (the perception of possible involvement as the victim of crime). Thus, although there is a good deal of variability in television viewing within neighbourhoods, as well as a good deal of variability on the index of the perception of the likelihood of being victimized (Index 1), television-viewing does not seem to predict people's perception of the likelihood of being victimized.

For the city people, however, there (still) does seem to be a relationship between total television-viewing and the willingness to venture out at night alone (Index 3). Those who watch a lot of television (and who live in the city) do not feel safe going out alone at night. The fact that this does not hold for people who live in the suburbs (either in high- or low-crime areas) should be noted.

Furthermore, for total television viewing, there is still a fairly consistent relationship with Index 7 (belief that people should arm themselves) across all areas: those people within each area who watch a lot of television are the same people who believe that people should arm themselves (questions 17 and 20 from the questionnaire).

Generally, it can be seen that Gerbner's conclusions, as applied to Toronto, are somewhat overstated. Although correlations similar to Gerbner's can be found, these correlations would appear to be at least in part a function of differences in actual crime between areas. Thus, as we found in Index 1 (likelihood of being a victim), those who watched a lot of television lived in high-crime areas and also saw the world around them as more dangerous. However, this interpretation does not account for everything. As indicated on Index 7 (belief that people should arm themselves), there still seemed to be a relationship with television: those who watched a lot of television in each of the four areas sampled tended to feel that people should arm themselves.

One final thing is worth noting: None of the correlations that are reported here accounts for much variance. In other words, although there are some consistent (and statistically significant) correlations, these correlations are not high in magnitude. Hence – to the extent that one can generalize from them – although television may be a factor to some extent in the perceptions that people have of these events, it does not account for very much of the variation that exists.

Discussion

In terms of the general purpose of this study, it must be concluded that Gerbner's interpretations of the relations between the amount of television viewed and the perception of violence and incidence of violence are at least oversimplified, if not absolutely incorrect.

The present findings show that a person's perception of personal violence and the incidence of violence is more a function of the actual incidence of such violence in their immediate neighbourhood and their own socio-economic environment than it is of their television viewing habits. In fact, the amount of television viewing seems to be part of those very subcultures that are associated with the different areas of a city that have the violent crime rates.

It is true that in this study all persons over-estimate the incidence of violent crime, and it is certainly most probable that such misperceptions are a result of exposure to the media at least in part. As other studies in this series have shown, to the media violent crime is both news and entertainment. Those uses of violence by all media may be responsible for people's over-estimating the frequency of violence. However, little in the present study suggests that misperceptions are a direct function of specific kinds of television viewing.

It is concluded that perceptions of violence, estimates of frequency of violence, amount of television viewing, and kind of television viewing seem to be a result of a complex mixture of cultural values, socio-economic factors, local geographic factors, and the actual frequency of violence. While these all may be influenced by television and television programming, it is an oversimplification to assume causal relationships between the amount of television viewing and perceptions of violent crimes.

Aside from the question of the relationship of television viewing to perceptions of violence, one can also look at the over-all survey results simply as a description of the perceptions that people have of violence and violence-related phenomena in our culture. In looking at the results in this way, however, one must keep in mind that, although we attempted to get a representative sample of adults living in four separate areas of Toronto, we did not attempt to get an over-all sample that would be representative of Toronto in general. However, since we did sample four quite different areas (a high- and low-crime area in each of two general areas – downtown and the suburbs), we can deal with the problem of "representativeness" by considering the amount of variability that exists across the areas that were sampled. The results in Table 6 show the over-all results (pooled across all four areas). In the discussion below, we have presented some examples of the variability that exists so as to deal with the problem of representativeness of the sample across Metropolitan Toronto.

First of all, it is clear that there is a lot of variability on how serious violent crimes are seen to be. Not surprisingly, crime is seen as more serious a problem in the high-crime areas.

	Suburb	City
High crime	19%	39%
Low crime	9%	7%

Percentage of respondents in each area who see crime as a serious or extremely serious problem (alternatives a and b from Question 1).

In terms of actually quantifying what constitutes an "exaggerated fear" of crime, there are no set standards. Obviously, what is "real" and what is exaggerated depends not only on how much crime there is in the particular neighbourhood that a person lives in, but also on such things as the exact location within that area and the particular life style of the respondent (and/or his friends or relatives). However, when one looks at the actual results from the "probability estimate" questions (2, 3, 4, 5, and 6), it is clear that people over-estimate the amount of crime that exists. We feel that it is safe to suggest that estimates of one chance in 100 or better (that is, alternatives a, b, and c) would reasonably constitute an "exaggeration" of the likelihood of being a victim of violent crime. As indicated in the tables below, there is clear variation across areas (with respondents in high-crime areas feeling, naturally, that they have a higher likelihood of being involved in crime). However, in all four areas sampled, there are substantial propor-

tions of people who apparently feel that they have a high likelihood of being the victim of a crime, et cetera.

	Suburb	City
High crime	42%	58%
Low crime	32%	26%

Percentage of respondents in each area who feel that they have at least one chance in 100 of being the victim of a violent crime if they are to walk alone at night for a month in their neighbourhood (alternatives a, b, and c of Question 2).

	Suburb	City
High crime	58%	70%
Low crime	46%	31%

Percentage of respondents in each area who feel that there is at least one chance in 100 that a child playing alone in a park would be the victim of a violent crime (alternatives a, b, and c of Question 3).

	Suburb	City
High crime	62%	72%
Low crime	48%	43%

Percentage of respondents who feel that they have at least one chance in 100 of being the victim of a serious crime if they walk alone in a near-by park each night for a month (alternatives a, b, and c of Question 4).

	Suburb	City
High crime	73%	64%
Low crime	69%	47%

Percentage of respondents who feel that there is at least one chance in 100 that an unaccompanied woman would be the victim of a violent crime at night in a Toronto subway station (alternatives a, b, and c of Question 5).

	Suburb	City
High crime	41%	54%
Low crime	25%	26%

Percentage of respondents who feel that there is at least one chance in 100 that they, one of their family, or one of their close friends will be the victim of an assault during the next year (alternatives a, b, and c of Question 6).

It is clear from these results, that people in all four areas sampled are very likely to over-estimate the amount of crime in their neighbourhood and the city. These percentages demonstrate that there are large portions of the population of each of the sampled areas who feel that it is reasonably likely that they would be involved in crime in their normal activities.

We can turn, then, to the response that people show to their estimates of crime. Substantial numbers of people in all areas avoid walking alone at night, at least occasionally (alternatives a, b, and c of Question 8), because they are afraid of being the victim of a violent crime.

	Suburb	City
High crime	60%	49%
Low crime	60%	57%

Percentage of respondents in each area who report that they sometimes avoid walking alone at night because they are afraid of being the victim of a violent crime (alternatives a, b, and c of Question 8).

Similarly, when one looks at the results of Question 9, it is clear that in each of the four areas sampled, substantial numbers of people report that there are areas around their homes where they are afraid to walk at night.

	Suburb	City
High crime	75%	68%
Low crime	65%	50%

Percentage of respondents in each area who report that there are areas near their homes where they would be afraid to walk alone at night (Question 9).

Not surprisingly, then, substantial proportions of the people in each area feel that more money should be spent on police patrols in their area of the city.

	Suburb	City
High crime	68%	58%
Low crime	55%	41%

Percentage of respondents in each area who feel that more money should be spent on police patrols of their area of the city (alternatives a and b of Question 13).

Other responses on the questionnaire show similar kinds of findings. People in high-crime areas were more likely than those in low-crime areas to feel that people should arm to protect themselves in their own homes.

	Suburb	City
High crime	24%	38%
Low crime	9%	10%

Percentage of respondents who felt that people would keep firearms in their homes to protect themselves (alternatives a and b of Question 17).

In all four areas that were sampled, people thought that they were more likely to be hurt by a stranger than they were by someone previously known (87 per cent of the

respondents indicated that they felt that they were more likely to be harmed by a stranger – alternatives a and b of Question 10.

Generally speaking, then, people in all four areas sampled see Toronto as a fairly dangerous place. Furthermore, they see it as a more dangerous place to live than it was ten years ago. When asked specifically about the downtown areas of the city, most people indicated that they thought these areas were more dangerous than they were ten years ago. Interestingly enough, this was especially the case in the high-crime suburb that was sampled.

	Suburb	City
High crime	76%	53%
Low crime	60%	64%

Percentage of respondents in each area who felt that the downtown areas of Toronto are now more dangerous than they were ten years ago (alternatives d and e of Question 28).

The people in the high-crime suburb were also most likely to feel that people in Toronto are now more tolerant of violence than they used to be.

	Suburb	City
High crime	63%	50%
Low crime	51%	48%

Percentage of respondents in each area who felt that people in Toronto tolerate violence more now than they used to (alternatives a and b of Question 29).

Not surprisingly, then, at least 60 per cent of the people in each area sampled felt that people were less likely to come to someone's help if that person were being attacked than they were in the past (alternatives d and e of Question 30).However, most people in all areas indicated that they themselves would probably give direction to a stranger at night (Question 31). They weren't quite so optimistic, however, about the likelihood that an epileptic would get help from other people.

	Suburb	City
High crime	52%	32%
Low crime	40%	42%

Percentage of respondents in each area who felt that an epileptic having a seizure would be unlikely to be helped (alternatives c and d of Question 32).

Finally, when respondents were asked whether they would intervene in a robbery in front of their home, once again there were differences among the four areas, with the respondents in the high-crime suburb indicating that they were least likely to intervene.

	Suburb	City
High crime	1%	21%
Low crime	14%	10%

Percentage of respondents in each area indicating that they thought they would intervene to help the victim of a robbery (alternative a of Question 34).

Recently, the Toronto subway has been a focus of attention for crime reporters. As indicated earlier (see Table 5E), the subway is seen as a dangerous place for unaccompanied women. It is not surprising that substantial numbers of people in each area sampled over-estimate the number of murders on the subway. Since its opening there has been one murder in the TTC subway system. Over 30 per cent of the respondents estimated that there have been at least six murders (Question 26). Similarly, approximately 29 per cent of the respondents estimated that there were over 20 assaults *per day* on the subway, when the official estimates are closer to one or two *a week*.

For whatever reason, the respondents to our questionnaire are not getting a very accurate view of crime.

Table 6, which follows, contains the over-all survey results, question by question. In interpreting this table, it should be kept in mind that these data are a reflection of the fact that we sampled four separate areas of Toronto. Thus, because we did not do a random sample of Toronto as a whole, one should not interpret these data as necessarily being an accurate reflection of all of Toronto. The questionnaire results were pooled over the four areas sampled. The numbers to the left of each alternative are the percentage of respondents who chose each alternative.

1. To what extent are crimes of violence a serious problem in your neighbourhood?

  6.8 (a) They are an extremely serious problem.
 12.8 (b) They are a serious problem.
 22.1 (c) They are a problem, but not a serious one.
 23.1 (d) They do not occur frequently enough to be considered a problem.
 35.3 (e) They are not a problem in my neighbourhood.

2. What do you think the chances are that if you were to walk alone at night on the residential streets in your neighbourhood each night for a month that you would be the victim of a serious crime?

 16.1 (a) approximately one chance in ten
  8.4 (b) approximately one chance in 50
 15.3 (c) approximately one chance in 100
 12.8 (d) approximately one chance in 500
 17.6 (e) approximately one chance in 1,000
 29.7 (f) approximately one chance in 10,000

3. If a child were to play alone in a park each day for a month, what do you think the chances are that he would be the victim of a violent crime?

 23.0 (a) approximately one chance in ten
 15.7 (b) approximately one chance in 50
 12.6 (c) approximately one chance in 100
 13.1 (d) approximately one chance in 500
 20.9 (e) approximately one chance in 1,000
 14.7 (f) approximately one chance in 10,000

4. If you were to walk by yourself in a park close to your home each night for a month, what do you think the chances are that you would be the victim of a serious crime?

 24.8 (a) approximately one chance in ten
 14.1 (b) approximately one chance in 50
 17.9 (c) approximately one chance in 100
 10.2 (d) approximately one chance in 500
 15.9 (e) approximately one chance in 1,000
 17.1 (f) approximately one chance in 10,000

5. What do you think the chances are that an unaccompanied woman would be the victim of violent crime late at night in a Toronto subway station?

 25.7 (a) approximately one chance in ten
 19.0 (b) approximately one chance in 50
 17.7 (c) approximately one chance in 100
 15.7 (d) approximately one chance in 500
 12.3 (e) approximately one chance in 1,000
  9.5 (f) approximately one chance in 10,000

6. What do you think the chances are that you, one of your family, or one of your close friends might be the victim of an assault during the next year?

11.7 (a) approximately one chance in ten
9.1 (b) approximately one chance in 50
16.4 (c) approximately one chance in 100
12.5 (d) approximately one chance in 500
22.9 (e) approximately one chance in 1,000
27.5 (f) approximately one chance in 10,000

7. How likely do you think it is that you or one of your close friends would have your house broken into during the next year?

25.4 (a) very likely
25.4 (b) fairly likely
21.0 (c) not very likely
9.9 (d) unlikely
10.4 (e) very unlikely
7.9 (f) extremely unlikely

8. Do you ever decide not to walk alone at night because you are afraid of being the victim of a violent crime?

27.4 (a) very often
11.7 (b) often
16.9 (c) occasionally
12.7 (d) almost never
31.3 (e) never

9. Is there any area around your home (that is, within a mile) where you would be afraid to walk alone at night?

63.8 (a) Yes
36.2 (b) No

10. Would you imagine that you would be more likely to be seriously harmed by someone you knew previously or by a complete stranger?

72.3 (a) much more likely by a complete stranger
14.5 (b) somewhat more likely by a complete stranger
7.3 (c) about equally likely by a complete stranger as by a person previously known
3.0 (d) somewhat more likely by a previously known person
3.0 (e) much more likely by a previously known person

11. How dangerous do you think it is for a female to hitch-hike (that is, how dangerous do you think it is for a female hitch-hiker to accept a ride with a male stranger)?

59.3 (a) extremely dangerous
19.0 (b) very dangerous
16.0 (c) fairly dangerous
4.2 (d) reasonably safe
1.0 (e) quite safe
.5 (f) very safe

12. How dangerous do you think it is for a female driver of a car to pick up a male hitch-hiker who is a stranger?

57.9 (a) extremely dangerous
19.1 (b) very dangerous
16.6 (c) fairly dangerous
4.7 (d) reasonably safe
1.2 (e) quite safe
.5 (f) very safe

13. Do you think it would be a good idea to spend more money on police patrols of your area of the city?

27.0 (a) definitely yes
27.3 (b) probably yes
17.1 (c) undecided
18.1 (d) probably not
10.4 (e) definitely not

14. Do you think that the police presently have sufficient powers to deal effectively with crime?

20.6 (a) definitely yes
28.6 (b) probably yes
16.4 (c) undecided
20.4 (d) probably not
13.5 (e) definitely not

15. Do you think that the police are doing an effective job of controlling crime?

31.6 (a) definitely yes
39.6 (b) probably yes
12.9 (c) undecided
10.0 (d) probably not
6.0 (e) definitely not

16. What percentage of serious assaults reported to the police do you think are solved?

15.2 (a) 0 to 20 per cent
27.5 (b) 21 to 40 per cent
32.0 (c) 41 to 60 per cent
18.9 (d) 61 to 80 per cent
6.4 (e) 81 to 100 per cent

17. Do you think that it is useful for people to
keep firearms in their homes to protect themselves?

11.9 (a) definitely yes
 9.9 (b) probably yes
 8.6 (c) undecided
17.0 (d) probably not
52.6 (e) definitely not

18. Do you lock your house when you leave it for a
short time?

76.8 (a) always
 8.4 (b) almost always
 4.7 (c) most of the time
 3.2 (d) occasionally
 3.2 (e) almost never
 3.7 (f) never

19. Do you lock your home when you are home in it
during the day?

49.3 (a) always
13.1 (b) almost always
 7.6 (c) most of the time
 8.4 (d) occasionally
 8.4 (e) almost never
13.3 (f) never

20. Should women carry a weapon such as a knife to
protect themselves against sexual assault?

14.3 (a) definitely yes
16.5 (b) probably yes
16.0 (c) undecided
20.7 (d) probably not
32.3 (e) definitely not

21. Some people have suggested that one way to
reduce the incidence of violent crime is to
encourage people to stay away from areas thought
to be high in crime. Do you think that this is
a good way of dealing with the problem of crime?

21.3 (a) definitely yes
22.1 (b) probably yes
14.4 (c) undecided
18.6 (d) probably not
23.6 (e) definitely not

22. What proportion of murders in Toronto do you
think are committed by people who could be
classified as mentally ill?

16.3 (a) 0 to 5 per cent
17.1 (b) 6 to 10 per cent
16.0 (c) 11 to 20 per cent
18.4 (d) 21 to 40 per cent
16.3 (e) 41 to 60 per cent
16.0 (f) 61 to 100 per cent

23. Approximately what proportion of assaults in Toronto are directed against members of racial minorities (that is, non-whites) by whites?

28.1 (a) 1 to 10 per cent
26.7 (b) 11 to 20 per cent
25.1 (c) 21 to 40 per cent
16.2 (d) 41 to 60 per cent
 3.9 (e) 61 to 100 per cent

24. What proportion of serious assaults in Toronto do you think are carried out by non-whites?

20.1 (a) 0 to 10 per cent
22.8 (b) 11 to 20 per cent
19.5 (c) 21 to 30 per cent
25.8 (d) 31 to 50 per cent
 8.5 (e) 51 to 75 per cent
 3.3 (f) 76 to 100 per cent

25. How many murders do you think took place in Metropolitan Toronto during 1975?

25.5 (a) fewer than 50
40.1 (b) 50 to 100
23.9 (c) 101 to 200
 6.2 (d) 201 to 300
 2.7 (e) 301 to 500
 1.6 (f) more than 500

26. During the last five years, how many people do you think were murdered in the TTC subway?

 4.7 (a) none
22.7 (b) 1
42.4 (c) 2 to 5
15.6 (d) 6 to 10
 6.5 (e) 11 to 20
 8.1 (f) more than 20

27. On the average, how many people do you think were assaulted each day in the TTC subway during 1975?

71.4 (a) 0 to 20
12.9 (b) 21 to 40
 5.4 (c) 41 to 60
 4.3 (d) 61 to 100
 1.9 (e) 101 to 200
 4.0 (f) over 200

28. Do you think that the downtown areas of
    Toronto are becoming safer or more dangerous
    places to live than they were ten years ago?

2.8 (a) much safer places
6.6 (b) safer places
28.3 (c) about the same
44.7 (d) more dangerous places
17.7 (e) much more dangerous places

29. Do you think that people in Toronto tolerate
    violence more now than they used to?

19.5 (a) definitely yes
32.9 (b) probably yes
18.0 (c) undecided
18.7 (d) probably not
11.0 (e) definitely not

30. Compared to the past, do you think that people
    are more or less likely to come to your help if
    you were attacked on a downtown street?

3.0 (a) much more
9.9 (b) somewhat more
23.1 (c) about the same
30.5 (d) somewhat less
33.5 (e) much less

31. If you were walking alone on a residential
    street at night and someone asked you for
    directions, would you stop and give him the
    directions?

29.2 (a) definitely yes
41.3 (b) probably yes
10.6 (c) undecided
8.9 (d) probably not
9.9 (e) definitely not

32. If a person were to have an epileptic seizure
    on the street in front of you, how likely do you
    think most people would be to help?

24.9 (a) very likely
34.6 (b) somewhat likely
23.5 (c) somewhat unlikely
17.0 (d) very unlikely

33. If, in the middle of the night, a stranger
    knocked on your door and asked to use your
    telephone to call someone to help him start his
    car that had apparently stalled on your street, which
    of the following would you be most likely to do:

7.7 (a) let him in
53.7 (b) ask his name, et cetera, and make the call for him
21.8 (c) tell him where the nearest public telephone was
7.9 (d) call the police
8.9 (e) close the door, lock it, and not make the call

34. If you saw an apparently unarmed man robbing someone in front of your home, what would you be most likely to do?

12.3 (a) intervene to try to help the victim
59.4 (b) call the police immediately
25.1 (c) call the police and then see if the victim needed help
 1.5 (d) wait until the assailant left and then see if the victim needed help
 1.7 (e) ignore the incident

35. Do you listen to the news on the radio?

63.1 (a) yes, every day
17.7 (b) yes, almost every day
 5.9 (c) yes, approximately three to four times per week
 7.4 (d) occasionally
 2.9 (e) almost never
 2.9 (f) never

36. Do you subscribe to a newspaper?

67.2 (a) yes
32.8 (b) no
     If yes, which newspaper(s)?

Globe:	9.5
Star:	55.3
Sun:	8.4
two of the above:	23.6
other:	2.9

37. How often do you read a newspaper?

51.7 (a) every day
13.1 (b) almost every day
13.5 (c) approximately three to four times per week
16.3 (d) occasionally
 4.2 (e) almost never
 1.2 (f) never

Study XII:

A Sampling of the Treatment of Violence by Toronto Newspapers

by Julian Roberts, Research Associate

The authenticity of a printed news item has long been its most important and contentious component. Endless debates arose over the partiality of daily information sheets posted in the ancient Roman forum, and many arguments undoubtedly were generated by the authors of the eighteenth-century "magazines", forerunners of the modern newspaper. It is, of course, seldom that news is transmitted by a mere string of facts. Inevitably the man behind the stylus, pen, or typewriter will introduce some bias by casting the same set of facts in a different light. Events are frequently "editorialized" to enhance the bare facts. In these days of highly competitive journalism, the paper that can present the same news in a more interesting or appealing way than its rivals will survive the longest.

Although television has established itself as the most popular medium in North American culture, there is evidence that people still rely heavily upon newspapers for information. In a survey carried out recently, 72 per cent of those interviewed said they read a newspaper regularly, whereas only 23 per cent indicated they watched the local news on television. This was a very small survey, but its findings do not contradict other similar ones. If we assume this finding to apply to the public at large, then the papers must still maintain a strong effect on our perceptions of such important social issues as violence in the cities.

With this in mind, great care must be exercised in presenting items that may alter these perceptions and subsequent behaviours. At times, a general indifference to this concern can be observed in the Toronto newspapers, as will become apparent from some of the following excerpts. The purpose here is not to isolate or indict any particular publication, but rather to highlight items from all three major local newspapers that may have undesirable effects upon their readers. It is often assumed that the primary purpose of the media is to inform the public, to present an accurate representation of reality from which equally accurate perceptions may be extracted. When newspapers fail to reflect society accurately, their readers are likely to hold inaccurate perceptions. With the issue of violence in the city the problem becomes particularly salient, since the social

costs resulting from false notions of urban danger can be considerable.

Back issues of *The Toronto Sun* were examined from January through October 1976. *The Globe and Mail* and *The Toronto Star* were only scrutinized during the period from June to October 1976. The *Sun* publishes a daily police report in which any crime reported in the previous twenty-four hours is recorded. In addition to this and the regular crime stories, there is also the "Crime Flashback" feature, which relives the more spectacular crimes of past years.

There are some readers who, for want of time or interest or both, merely flick through a newspaper reading most, if not all, of its headlines and few, if any, of its stories. For some readers, then, headlines tell all. Rather than just describing or summarizing the contents of a story, they become a part of them. They must be both arresting and informative: this can often only be achieved at the expense of accuracy. To quote the linguist, Simeon Potter (1965):

"The short words, not necessarily the right words, must be found at all costs. . . . In the language of headlines any compact, contract, agreement, engagement, convention, covenant, stipulation, armistice, pledge, truce or treaty becomes a "pact". . . . Any abridgement, abbreviation, shortening, curtailment or reduction a "cut". . . . Any investigation, inquisition, interrogation, examination, scrutiny, inquiry or exploration a "probe". . . .

The list is endless. It seems clear then that for the sake of brevity and appeal, accuracy must often go by the board. Perhaps the most spectacular example of a headline designed to attract without informing, to promise without fulfilling, comes from a British newspaper. In describing the ordeal of one Martin Hartwell, a Canadian of German extraction who was driven to cannibalism in order to survive two months in the wilderness, the paper used the following headline: "Ex-Luftwaffe pilot devours British nurse".

Numerous variables affect the impression left by a news story. One empirical study by A. Booth (1968) showed that pictorial accompaniment, duration, and frequency all facilitate, to some degree, the later recall of news items. A story's location, length, headline size,

style, and whether or not there is a picture all probably affect the impact of the story.

The problem of significant social costs arising from distortions in the media's presentation of violence may be seen from the following perspective. Assuming that people avoid certain activities through fear of violent consequences, they must have an exaggerated sense of danger in the city, which is a result of being more aware of those violent incidences that do occur. In other words, they are recalling violent news items more than non-violent ones. Selective use of the variables mentioned above is presumably responsible for this differential recall.

Pictorial accompaniment has possibly the most dramatic effect, and frequently newspapers include photographs that convey little or no information but merely serve to capture the reader's attention. An example is seen in *The Toronto Sun* of June 21, 1976 (see also the same incident reported in *The Toronto Star*), in which a homicide story is accompanied by a picture showing the chalk outline of the victim's final position, surrounded by blood-stains. In the July 21, 1976, issue of the same paper a spouse-killing story contained a photograph of the victim's (and murderer's) home with the family's truck parked in the driveway. Of course, the vehicle had nothing to do with the incident and the front of the house affords no insight into the crime. The photograph is irrelevant and could only serve to enhance reader recall and also embarrass the four children of the deceased, since the address was mentioned in the report and the house number is easily readable in the picture. This questionable policy of doing little to disguise the victims or the authors of various crimes is also in evidence in the daily crime round-ups. Here names and addresses of victims are published, along with descriptions of suspects, for example, a "50 year old McCowan Road man was charged with gross indecency"(October 15, 1976).

Occasionally photographs and sketches form a large part of a paper's coverage of some event. Naturally, there are some proceedings which by their nature require pictorial rather than verbal description – large public events usually; in these, the spirit of the moment can only be captured by the camera. It seems doubtful, however, that this philosophy can justify the inclusion of pictures about isolated, personal homicides, which only entertain but do not inform. For example, on January 11, 1976, a man was killed while attempting to escape Metro police by holding a hostage. The following day this received banner headlines in the *Sun*. The front page contained a series of photographs showing the actual moment of death. (This was in fact the only story mentioned on the front page.) Seven full pages of the paper were devoted to stories, pictures, and sketches in some way related to the deceased or his death. Then there was the Sunday *Sun* of August 22, which carried a dramatic full-length front-page photograph of a tearful woman, above whom there was the

large headline: "Witness to murder". The following day saw a minute correction to the effect that the woman only knew the victim and in fact had not been near the scene of the crime at the time.

Next to photographs, lurid details and sensational descriptions seem to be the most popular way of arousing reader interest. Sometimes accounts of assaults, and homicides especially, contain a remarkable wealth of detail:

[There was] a stab wound near the navel which severed several arteries. His body was found in a bed in the 2nd floor bedroom of their Parkway Avenue flat in the Roncesvalles and Howard Park Avenue district. [*Sun*, March 3, 1976]

[The] victim had suffered a 3″ wound in the stomach, inflicted by a 7″ black-handled butcher-knife found in the kitchen along with blood-covered towels, gauze, bandages, tape and rugs which were found in a garbage bag. [*Sun*, March 2, 1976]

[On March 16, the same publication described a man who was] praying for his life when one of the two young men who had robbed him plunged a dull fish-knife into his chest and then twice tried to slit his throat.

Such details are certainly eye-catching, if not exactly in proportion in terms of impact. These morbid and grisly descriptions correspond to the on-screen murders in television shows: that is, the same information could be conveyed less dramatically without alarming the viewer or reader (as the case may be). People reading gruesome details such as these are bound to recall them better than brief accounts that only reveal the cause of death. The very brutality of these stories becomes a mnemonic device to facilitate later recall. The average reader can hardly help but be startled by stories written in this fashion.

Usually violence in the city receives prime-space location in the three major newspapers. The *Star* will generally refer briefly to an incident somewhere on the front page and will then follow this up with the rest of the story on the second page. Less dramatic or important items appear later, on the "Metro News" page. The *Sun* reports any violent incidents on the first three pages, before it reaches the international news and the columnists. In *The Globe and Mail*, location seems to vary with the individual importance of each item.

One particular story is worth mentioning at this point because of its different treatment by the three newspapers. In September, Dr. Norman Bell of the University of Toronto released details of a forthcoming Statistics Canada publication that showed that only 13 per cent of Canadian murder victims over the past 14 years were killed by strangers. Most people, when asked, will place the percentage much higher – possibly as a result of the greater publicity accorded this type of homicide. The *Sun* published this little-known statistic and followed it with a statement by a Metro police detective who "declared" that "statisticians and lawmakers were giving the public the wrong image", since in Toronto, in 1976, there had been more murders by strangers. The *Sun* printed Bell's statistics and the

detective's opinion, based upon statistically negligible figures, under the headline "Our murders break pattern" (that is, the pattern present in the figures for the past 14 years – see September 13, 1976, issue). Moreover, directly beneath this story was a description of a senseless killing by a "stranger" as though to further emphasize the detective's point of view. Anyone reading the first story would inevitably read the second. The *Star* published a story on Bell's figures under the headline "Fewer Metro killings now family affairs", but then buried it at the very end of one of the later sections of the paper (September 13, 1976). *The Globe and Mail* made little mention of the story.

An examination of some of the headlines of the past few months also reveals some interesting differences. Headlines take up far more space in the *Sun* than in the other two major papers. The ratio of headline-to-story space is consistently higher, with its consequent effect on those people who pay more attention to headlines than stories. This paper allots banner-style front-page headlines (that other papers reserve for moon-landings and similar historic occasions) to many stories of questionable importance. Take, for instance, the *Sun* front page of September 7, 1976. The headline reads: "Police force gate as Kiss kids riot". Underneath this another, smaller one appears: "Rock fans storm Varsity Stadium". The definition of the word "riot" from the *Compact Edition of the Oxford English Dictionary* (London: Oxford University Press, 1971) runs as follows: "A violent disturbance of the peace by an assembly or body of persons; an outbreak of active lawlessness among the populace; a hostile attack or encounter." This is hardly the appropriate word to use to describe the incident, which was the result of confusion rather than premeditation. "Storm" is also hardly the word to use in describing a disturbance at one entrance to the stadium. In this instance, the *Sun* has created a front-page item out of a one-column, middle-of-the-paper story. Headlines of this nature also reinforce the impression, held by some people, that "rock" fans are unruly and potentially explosive.

An interesting contrast appears in the August 17, 1976, issue. When an unarmed man who was an out-patient, and only that, at a Toronto hospital, held a boy hostage for an hour, the *Sun* used the following headline: "Cops free boy hostage from mental patient". The *Sun*'s definition here of what constitutes a mental patient is quite curious. It might be noted that the public believes "mental patients" to be responsible for a greater percentage of homicides than is actually the case. Needless fear of people being treated for mental disorders may lead to greater discrimination against these individuals. The *Star* omitted any reference to mental illness in their headline which ran: "Police smash through door free hostage" (August 18, 1976).

On June 21, the *Sun* published the picture of blood stains previously alluded to with a covering story headed "Man dead in pool of blood". The *Star*'s story

conveyed the same amount of information in approximately one-eighth the space, and was headed "Charges laid in fight that left man, 31, dead". The latter treatment seems eminently preferable. Sometimes, headlines will include information that is irrelevant, yet somehow makes the violence more shocking and sensational: "Man beaten up at subway on way home from church"(*Sun*, January 5, 1976)

"Mom of 4 shot dead" (*Sun*, July 21, 1976)
"Murder victim left dance with a man"(*Sun*, September 7, 1976)

As if in response to statements made by TTC officials describing how safe the subway system was, the *Sun* printed a story (within the "In the News" section) which was headlined "One veteran driver who knows the TTC is not as safe now". The reasons why this driver "knew" rather than merely "thought" the subway to be less safe were not clear from the ensuing story. In a similar vein, the *Star* on June 18, 1976, published a story under this headline: "Forced to barricade themselves – seniors fear the streets, forum told". The statement prompting this headline was merely a single opinion based upon nothing more objective than personal experience.

A singularly bizarre incident between two teenagers, formerly lovers, received much coverage in both the *Sun* and the *Star*. The *Sun*'s headline ran "Her throat was slit inside ambulance" (September 22, 1976). The crucial aspect to the writer of this headline was obviously the fact that it occurred inside rather than outside the ambulance. In all probability the incident would have taken place wherever the two individuals had happened to be at the time. The *Star* covered the incident in a somewhat similar manner, but did go into more depth concerning the relationship between the two people involved.

Headlines can also be very effective in arousing emotion in the readers – witness the following article on the largely media-created issue of subway safety: "Slain girl's mom begs for tighter subway security" (*Sun*, June 9, 1976). Notice "slain" instead of "dead", "girl" instead of "victim", "Mom" instead of "parent" or "mother", and "begs" as opposed to "asks", "demands", or even "pleads". This deliberate choice of words is obviously calculated to arouse the readers. No mention of the actual safety statistics is made in the ensuing article; there is nothing to remind the reader that the Toronto subway may be the safest system in the world.

A good contrast is noticeable in two treatments of different murders, but this time from the same paper. One has a conspicuous headline, "Civil servant found beaten and strangled" (*Sun* , September 21, 1976) and contains the usual statements describing the victim as "a nice guy, I don't know why anyone would want to murder him". The implication here is that the murderer must have been a stranger since no one who knew the deceased could possibly have wanted to kill him. The second story "Metro wife on murder charge" (*Sun*,

October 4, 1976) is a brief 57-word description (of another murder) that is nevertheless perfectly adequate.

Consider the effect of both stories upon the reader: He or she is more likely to recall the former because of its length and sense of drama and yet there is nothing to remind the reader that spontaneous murders by strangers are relatively rare events. Nor is there any mention of the fact that the reason the crime seems to have been committed by a stranger is that the police at that point probably did not know enough about the antecedent circumstances. This is a good example of the trend in news reporting to dramatize the initial diagnosis – a motiveless homicide – one that is subsequently modified when the investigation has uncovered more information. In another similar instance, a man was killed by two others who burst into his apartment late one night; this was the subject of much attention since the subsequent police investigation was at first unable to connect the murderers with their victim. Some time later it was discovered that they were card-playing acquaintances of the man who were owed a substantial amount of money arising from gambling debts. They had come to collect.

Sometimes these relationships do not come to light until a trial has begun and, predictably enough, an ongoing trial receives far less attention in the papers (until the verdict is about to be announced) than the original murder. This could partly explain why many people believe there are more stranger-to-stranger killings. After all, that is the kind of homicide they are most likely to read about. Yet another example of this trend is the treatment of the death of one Mary McKenna, who was found dead in her bedroom (*Sun*, September 21, 1976). Initially, there seemed to be no connection with anyone who knew her; later, it turned out that she had attended and left a dance with a friend of hers who subsequently disappeared.

This trend is not restricted to the newspapers. Back in June 1976, a man was beaten up, after which he told the police he would "get even" with his assailants. Thus far it was not a big news item; however, three days later the same man was found floating in Grenadier Pond in Toronto's west end. The radio broadcasts made much of the "obvious" connection between the man's words of revenge and his untimely death. In fact, the inquest held a few days later clearly established that there had been no foul play involved. This finding received the briefest attention in the *Sun* (June 10, 1976) and was not mentioned, to the best of our knowledge, on any subsequent radio news broadcasts. The same pattern is clear here: People who heard or read about the man's death probably did not see the small follow-up and, therefore, continued to believe that the incident was just another homicide. Small wonder many people believe there were far more than just 48 murders in Toronto last year (1975).

On a separate occasion, a headline announced "Another beating murder" (July 21, 1976). This death was not a case in an homicidal epidemic (as the title may have led some to believe), but merely the fourth murder of its kind in that area during the previous seven months. Actually the article later went on to state that this "latest" murder was not officially connected, by the police, with any of the previous ones. Perhaps the article would have been more accurately headed "Metro beating murder" or something similar. Certainly the use of "another"seems unjustified.

One *Sun* article is a gem of thoughtless journalism. The article begins by reporting the TTC chairman's statement that "violence in the subways is an absolute non-issue", and then goes on to list a number of "tips" designed to make a subway ride safer. These include checking the back seat of your car for suspicious strangers and selecting the driver's car when actually on the subway. Although women are advised to carry a rape whistle, it should not, according to this article, be carried around the neck where it is apparently "handy for the strangling type of pervert". Given the rather alarming nature of some of these "tips", it is anyone's guess whether this article would reassure subway riders or make them more anxious.

There are certain areas – certain specific locations in the city – that some people seem to associate naturally with violence and danger. These include the various Ontario Housing developments in general and the one located at Regent Park in particular. When an incident takes place in an OHC development, the location is frequently mentioned in news reports. On March 16, 18, and 19, 1976, the *Sun* ran three articles on an incident that occurred in Regent Park. There were exactly four direct references to Regent Park in each of the three articles.

Another favourite is the rooming-house. Whenever a murder or a beating occurs in, near, or around a rooming-house, the papers are sure to report it as that rather than as a house, or a residence: "The body of a man who died after a scuffle in a West-End rooming house last week remains unclaimed at the Metro morgue" (*Sun*, April 22, 1976), and "Investigation is also continuing into another Ontario St. murder. . . . R.P. Harte was found in the basement of a rooming-house" (same paper, same day).

When a rape is reported in any location other than the victim's or rapist's home, the papers usually go to great lengths to describe the exact location. The precise area of the parking-lot or park is described, rather than just reporting the crime as occurring in "a park". The crime statistics reveal that rapes in such public places are relatively rare events; by far the majority of sexual assaults take place in the residence of either the victim or the rapist. Rape stories in the paper never conclude by stating the actual incidence of rapes in parks or underground garages. Informal interviewing of females in the city shows that many of them are needlessly afraid of the parks in Toronto.

The number of violent assaults on Yonge Street is not

increasing dramatically, and yet there are some people (especially women) who refuse to walk down Yonge Street at night for fear of being attacked. The presence of crowds on the "strip" is probably responsible for its relative safety compared to some less busy and more dangerous streets in Toronto's east end. If more people start to become sensitive to violence in the downtown core in general, they are likely to stay away, thus unconsciously making the area less safe. This notion of self-fulfilling prophecy is not of course new; it has been proposed before and its existence can be observed in some American cities, of which Detroit is the usual example. In that city of approximately 1,500,000 residents, a lifeless downtown core witnessed 685 murders last year, a figure sure to be surpassed in 1976. Detroit newspapers publish, towards the end of the year, the murder statistics, which are adjusted daily, alongside the pollution index and the temperature readings. It is obviously in the interest of the city to prevent its citizens from needlessly avoiding the downtown area.

The Toronto Sun dated September 5, 1976 provides another example of a newspaper's penchant for distorting a violent incident. The occasion this time was the suicide of a man in a high-rise building on Dundonald Street. Before he turned his rifle on himself, the man fired several shots at the street below. Some pedestrians were injured, mainly by flying asphalt kicked up by the bullets. Since the shots were fired at the street rather than the sidewalk, there is some cause to doubt the presumption that he was actually aiming at human targets. All the shots were fired within five minutes, and none of them were contingent upon external events, that is to say, the last self-inflicted shot was not a desperate move to avoid police capture. Since no one was near him at the time of death, some people have suggested that he was shooting to attract attention rather than to kill individuals. When the story appeared in the *Sun*, it was transformed somewhat for the sake of a good headline: "Sniper fires on downtown shoppers".

The first inaccuracy involves the use of the word "sniper" which is defined in *Funk & Wagnalls Standard College Dictionary* (New York, 1973) as one who "shoots at or picks off individual enemies from hiding". This word would be perfectly applicable were it not for the fact that the man did not "pick off" the people, but shot apparently almost randomly at the ground, was not aiming at individuals at all, was not firing at an enemy in the usual sense of the word, and was not doing all this from hiding, but rather from a point on the building that made him visible to all on the ground. A more accurate word to have used would have been "gunman" or more specifically still, "rifleman". The difference may not appear very substantial at first, but upon reflection there is something far more alarming about the word "sniper", with its connotation of sudden, defenceless death or, more recently its association with terrorism and urban guerrilla warfare.

The word appears no less than four times on the front page. There is also no evidence that the man's targets were "downtown shoppers", to make this assumption implies the absurd notion that the rifleman carefully avoided all non-shopping persons on the street below. The headline in the form it appeared is the most arresting, if not the most accurate, description of the incident, and for this reason it was probably selected. Such a headline only feeds the fears of citizens who are already afraid of the area. Now they will presumably be on the alert for "shopper-crazy homicidal maniacs" when they next go shopping downtown.

The Globe and Mail gave the shooting incident less dramatic attention, but still used the word "sniper" throughout its coverage. They did, however, use the following headline: "Man, 30, wounds 5 just after his release from mental center". The implication here is that the man's actions were directly contingent upon his release from the mental centre. Whether this was true or not is an entirely separate matter and not one that could be decided by a newspaper reporter.

Interestingly enough, none of the papers raised the issue of gun control, for which this incident is a perfect argument. The man bought his rifle immediately before climbing to the top of the building. Had he been required to make the necessary licence application advocated by gun-control lobbyists, the rifle would not have been in his hands that afternoon.

Sometimes bad lay-out makes an attempt at correcting public misperceptions backfire. The Saturday *Star* dated October 23, 1976 contained the front-page headline: "Metro's fear of crime exaggerated, experts say". The whole of the second page went on to document this position with statistics and studies relevant to the question. Each article begins, however, with the description of something alarming. The front page starts off by relating the story of a senseless assault, one story on the second page tells readers how to deal with a burglar and another describes a man who trains dogs to be savage and vicious guardians of private citizens' homes. Whatever reassuring figures there are seem to be buried deep within an article, usually near the end. Once again, the question must be raised: Do articles in this style and format reassure the public about the relative safety of their city or do they alarm them by making the issue more visible? (See Study XIII.)

One interesting juxtaposition can be found in the *Star* of November 10, 1976, in which an article about an insane murderer was placed alongside another story about another murder, this time of a school girl. Then there is the *Globe*'s headline treatment (November 22, 1976) of the court proceedings of the trial of two young men accused and subsequently convicted of a racial assault. Why the assailants' racial, inaccurate epithet had to be repeated in one of those headlines is not clear; it merely serves to force the term "Paki" into the public's mind even more than it is already. At present, it

is the usual racist term applied to Indians, Pakistanis, Burmese, Malayans, et cetera.

In a recent *Star* story (December 23, 1976), a man was attacked in the Beaches area. The crucial aspect to this story, according to the headline, was the fact that he was "walking from store".

The Toronto Sun placed two incongruous headlines together on December 3, 1976. One read, "I killed my husband but I loved him", and another stated, "The wonderful ways you're saving power". Presumably, the *Sun* regards the former as mundane as the latter. On the second page was an emotionally charged story headed "Sobs wrack accused killer". On the same page was another story headed: "Torso murder case: Odor was sickly".

Another *Star* story described a rescue attempt that resulted in a beating for the would-be rescuer. The headline and the moral of the story was: "Rescue attempt leads to beating" (November 22, 1976).

These examples lead one to treat the newspapers' claim to be adequately informing the public with some scepticism. In numerous instances, a flagrant disregard for the accuracy of the story is displayed. Occasionally, these lapses result from a stronger desire to attract attention than to inform the public, but presumably they often originate in thoughtless journalism. Since the social costs arising from inaccurate public perceptions are evidently great, one wonders why more caution is not exercised.

The five most evident (and possibly most damaging) trends observed in newspapers of recent months can be summarized here. First, all newspapers to some degree sensationalize violence needlessly; this includes describing items in lurid detail, accompanied by irrelevant photographs and sketches. Second, some papers place appeal before accuracy, thus distorting the image presented to the public. This appears to be especially true of headlines. Third, the initial (usually inaccurate) assessment of some crime, say a homicide, is given more space and attention than the subsequent investigation. In this manner, readers are acquainted only with the early assessment of a crime by a reporter; the later facts, which often change the nature of the charge, the antecedent circumstances, and the identity of the accused are not so accessible to the occasional reader. This could help to explain why many people believe most murders to be the result of stranger-to-stranger encounters.

A fourth disturbing pattern is the papers' consistent failure to accompany violent stories of an alarming nature with a brief paragraph outlining the actual incidence of that particular crime. At least some of the space now devoted to pictures and opinions could be more profitably used to include these very necessary figures. Readers are less likely to be alarmed by a downtown beating-murder, if they are aware of the rarity of such homicides. Lastly, newspapers too often associate crime with specific locations, such as subway

stations, parks, Yonge Street, et cetera. Often these location details are not relevant to the story: their inclusion only increases public fear of usually safe everyday locales.

The undesirable consequences that arise within a community whose members hold irrational, exaggerated fears about violence can be avoided by correcting these false impressions at an early stage. This means focusing upon the main source of information – the media – in order to align more closely their images of society with reality.

To view the manner in which Toronto newspapers treat crime and violence in a proper perspective, it is worth reviewing some of the pertinent research that has been conducted in the field of mass communications.

Several studies have focused upon different aspects or techniques of news presentation both in the papers and on television. Some of the methods in use for decades are now being re-appraised in order to find exactly how the audience extracts its information. A number of technological innovations over the past few years have facilitated a drastic reduction in the interval between an event's occurring and its subsequent presentation as a news story on the other side of the world. The concept of a "global village", as McLuhan would describe it, is now, and has been for some years now, a reality which is central to the dissemination of news.

The presence of global news agencies such as Reuters and the Associated Press means that notable crimes or acts of violence in areas far removed from a paper can still be carried in its columns. In this way, the paper can publish stories related to the crimes occurring within its own community and others relating to crimes committed across the world. The local illustration of this point is *The Toronto Sun* which carries stories from across the continent and, in their "Crime Flashback" feature, from across the years. This paper thus manages to employ the dimensions of time and space in its search for shocking criminal exploits.

Some of the issues brought up in the previous discussion of local newspapers have been raised by earlier researchers. First of all there is some evidence to support our concern for the misuse of the word "sniper". Researchers at The Lemberg Centre for the Study of Violence investigated 25 news stories in which premeditated, selective sniping resulted in injuries. They found little evidence for either conspiratorial planning or systematic sniping. Many of the people injured were victims of shotgun blasts, an equally serious but entirely different kettle of fish, especially with regard to the effect on the public. There was precious little to sustain the presentation in the news, which raised the spectre of a hidden, single-round sniper.

The researchers saw their results as supporting the view that the press had generated a certain expectation and then interpreted the event accordingly. In this case, they had the image of the sniper in mind prior to describing the event. To quote Hartmann and

Husband: "this would seem not to be the case of deliberate distortion by the press so much as an example of the way a scenario or news perspective may come to shape perceptions and interpretations".

These two writers also mention another interesting aspect of the news media, and one prominent in many forms both here and in other countries. The news media are adapted to what Hartmann and Husband describe as a "diurnal rhythm". Not only do they appear consistently in a 24-hour cycle, but they are programmed to present events that have taken place within the preceding period. Anything else is not news, or is at best stale news.

This leads the newspapers to report primarily those events that require a short space of time to occur. Since it usually takes little time to accomplish the destruction of another person, murders make ideal news items for all forms of the media. This is above and beyond their suitability as crowd-pleasers. Rapes, short prison dramas, riots, fires, and suicides are also very suitable. Other events such as a protracted court case or an example of racial or economic exploitation are not so tailored to mass consumption. These events do not achieve a dramatic climax within a few hours and are, therefore, not as amenable to instant description. Hartmann and Husband quote the example of ghetto conditions. The day-to-day exploitation and frustration that are part of ghetto life remain unreported; the isolated riot, with its accompanying violence, that arises from these conditions is sure to hit the front page.

The news media can also have the adverse effect of needlessly polarizing segments of society by forcing the reader or the viewer to accept a simplified explanation of an event such as a riot. The media cannot describe an occurrence in terms of underlying social forces and still less by reference to the structural features of society, but they do have to "point the finger" somewhere. A reader will regard a story without an explanation as unsatisfying. This is avoided by "personalizing" the event, by selecting an easily identifiable person or group of persons at whose doorstep the blame may be laid. This leads to the usual media stereotypes, to "culprits" such as students, left-wing political extremists, and civil-rights demonstrators – to cull some examples from the Sixties.

In this manner, the news is far more digestible to the public. Without a definite cause, events become unintelligible to the reader, and he will consider himself uninformed. Of course, any attempt to divine the true cause to a complex mass event such as a riot within the short space of a newspaper column is doomed at best to a gross oversimplification. Another writer, D.J. Boorstin, referring to the trend to sensationalize the news, says the following:

"There was a time when the reader of an uninteresting newspaper would remark 'How dull is the world today!' Nowadays he says: 'What a dull newspaper!'." Today's reader has been conditioned to expect dramatic and sensational

stories, and when they do not appear, he has sufficient faith in his notion of reality to consider the paper to be in error. He *knows* there is some sensational news somewhere in the city; it just hasn't been reported. . . . The effort to put pep into the news means that the slightest disturbance is likely to be headlined 'More Violence Flares' and a dispute over political policy as 'A Race Row'. Not only headlines but the selection of events to be covered and items to be published is also influenced by the need to titillate, hold, and if possible, increase the audience. The news media respond quickly and with keen interest to the conflicts and controversies of the racial story, but for the most part, disregard the problems that seethe beneath the surface.

Hartmann and Husband also have something more to add:

Conflict and controversy are the essence of 'newsworthiness' and their significance as criteria in news selection is as apparent in the coverage of sport as it is in politics and race. The subjective skills of the newsman when applied to the reporting of race produce an emphasis on conflict, negativeness and the unusual that again sets 'newsworthiness' at odds with reporting underlying trends and background information. It is the discrete event which is more able to encapsulate the elements of conflict and excitement and which can be condensed into a forceful news story. The underlying processes of urban living and the 'reasons' for prejudice and discontent are on these criteria less amenable to manipulation into good news items than are manifestations of violence, crime, and individual tragedy which are the more visible symptoms.

Although these two authors are referring specifically to the news media's view of racial problems in Britain, the same principles are discernible in the treatment of crime and violence in North America.

Returning briefly to the effects of newspaper headlines, there are a couple of studies that indicate that a great deal of influence is wielded by the headline writer. Apparently, the larger the headline the more likely it is to be read and also the more likely the reader is to continue reading the story below the headline (Knapper and Warr, 1965). In 1928, Emig found that 51 per cent of the respondents in his survey claimed to base their opinions on reading or skimming the headlines. This compares with 31 per cent who claim to base their opinions on reading the actual stories.

It is probably true to say that the man who writes the headlines exercises as much power over the readers' perceptions as anyone on the newspaper staff. Headlines appear to be more effective in arresting attention and swaying opinion than many people believe. They also determine whether a given person will read that particular article or by-pass it. The effect of the headlines is also not restricted to newspaper readers alone; there seems to be a number of people whose only contact with the papers is the sight of the headlines in someone else's paper. The only parts of the paper visible to the proverbial over-the-shoulder reader are the headlines. In a crowded subway or on the evening bus, the headlines are presumably scanned by many people besides the owner of the paper.

There are a few experts in the field who are more

concerned about the development of anxiety through an over-abundance of newspaper violence than in the stimulation of aggression thereby. This effect is strongest when people believe what they read to be true. Although several studies have shown that the public sometimes views newspapers with a certain amount of scepticism, the realism of televised newscasts has not been challenged. The wave of "realistic" motion pictures may also be increasing anxiety about violence in the general public. Several popular movies of the past few months have treated specific social problems related to violence in a way that can hardly reassure an already edgy public. For those who remain complacent about the existence of snipers, there is *Two Minute Warning*; for those searching for a speedy solution to the problem of crime in the streets, there are *Death Wish*, *Taxi Driver*, and *Dark Sunday*; anyone concerned about the decline of retributive justice can draw comfort from *Straw Dogs*, *Lipstick*, or *Death Week-end*.

An Examination of One Newspaper's Attempt to Set the Incidence of Violence in Perspective

There is ample evidence from the previous studies in this report that adding factual information concerning the incidence of various types of crimes to a crime story significantly alters the reader's, viewer's or listener's perceptions towards a more realistic picture. During the course of completing those studies, it happened that one Toronto newspaper, *The Toronto Star*, ran some feature stories on crime and the social perceptions of crime on pages one and two of the paper for Saturday, October 23, 1976. The page-one headline read: "Metro's fear of crime exaggerated, experts say". The purpose of this study was to assess the impact of such an isolated feature story on a person's perceptions of the incidence of violence.

This experiment used actual newspapers as stimuli. There were two conditions. In the first condition, subjects were exposed to a copy of *The Toronto Star* for October 23, 1976, which contained a number of stories on crime in the city under such titles as "Metro's fear of crime exaggerated, experts say" and "Violent crime may be on the decline". In the second condition, subjects received a copy of the previous day's paper, which did not contain any such stories.

The subjects were Ontario Science Centre patrons who volunteered for the study. Upon entering, they were given one of the papers and were asked to read through the first three or four pages. When they had done this, they were given a questionnaire containing items related to perceptions of danger in the city. Once they had completed this, the experiment was at an end and they were given a thorough description of the general aims of the study. The first part took about ten minutes and the second about five.

The results of this study are shown in Table I. Alternatives to each question were assigned the numbers one to five corresponding to the letters "a" through "e". The means were then calculated for the two groups. As can be seen from Table I, there are very small differences between the two groups and these proved to be non-significant using analysis of variance.

The conclusions to be drawn from this small study are that if it was the intention of the newspaper to convey a realistic impression of the incidence of violent crime, this attempt failed. However, a brief examination of the content would suggest that this failure is not surprising. The lead feature begins with a multi-paragraph description of an apparently senseless violent crime. On page two, the headlines proclaiming a decrease in violence are interspersed with stories of how to protect oneself against crime.

When considered with other studies in the series, this study would suggest that more realistic perceptions of violence can be obtained through supplementary crime news stories with accurate and thoughtful background information. Attempts to provide such information in isolation from news reports seem to be ineffectual. This final generalization might not hold, however, if such attempts were more thoughtfully executed.

Table I: Mean Responses for Feature Story and Control Group

1. What do you think the chances are that you, one
    of your family, or one of your close friends might
    be the the victim of an assault during the year?
    1 (a) approximately one chance in ten
    2 (b) approximately one chance in 50   Feature story: 3.30
    3 (c) approximately one chance in 500
    4 (d) approximately one chance in 1,000   Control: 3.52
    5 (e) approximately one chance in 10,000

3. In relation to houses or small apartment buildings,
    how dangerous do you think high-rises are?
    1 (a) much safer
    2 (b) somewhat safer   Feature story: 3.13
    3 (c) about the same
    4 (d) somewhat more dangerous   Control: 3.43
    5 (e) much more dangerous

4. What do you think the chances are that if you were
    to walk alone on the residential streets in your
    neighbourhood each night for a month you would
    be the victim of a serious crime?
    1 (a) approximately one chance in ten
    2 (b) approximately one chance in 50   Feature story: 3.17
    3 (c) approximately one chance in 500
    4 (d) approximately one chance in 1,000   Control: 3.52
    5 (e) approximately one chance in 10,000

6. How many murders do you think took place in
    Metropolitan Toronto during 1975?
    1 (a) fewer than 50
    2 (b) 50 to 100   Feature story: 2.04
    3 (c) 101 to 200
    4 (d) 201 to 300   Control: 2.30
    5 (e) 301 to 500

8. Do you think that the police are doing an effective
    job of controlling crime?
    1 (a) definitely yes
    2 (b) probably yes   Feature story: 2.65
    3 (c) undecided
    4 (d) probably not   Control: 2.74
    5 (e) definitely not

9. Do you ever decide not to walk alone at night because
    you are afraid of being the victim of a violent crime?
    1 (a) very often
    2 (b) often   Feature story: 3.39
    3 (c) occasionally
    4 (d) almost never   Control: 3.49
    5 (e) never

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Collective Conflict, Violence, and the Media in Canada

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violence and media data, and interview material – is available
from the authors. Strict confidentiality will be observed.

Introduction

This report, written under the auspices of The Royal Commission on Violence in the Communications Industry, surveys the academic literature on the relations among the media, collective conflict, and violence; analyzes international, Canadian, and Ontario data on these phenomena; analyzes the violent content of major Ontario newspapers; examines seven modern cases of violent conflict in the province; and makes recommendations to the Commission.

The dearth of Canadian research on the particular aspect of the Royal Commission's terms of reference that we have undertaken required that a unique approach be adopted. There has been practically no rigorous study of domestic unrest in this country. For its investigation of television and social behaviour, the United States Surgeon General's Scientific Advisory Committee could command immediate research on the topic, partially because of the extensive work done by universities over the years and also because of the voluminous evidence produced for the Report of the National Advisory Commission on Civil Disorders and the Report of the National Commission on the Causes and Prevention of Violence. In other words, before the Surgeon General's inquiry began, there already existed a large amount of data on violence. In Canada, this material still does not exist, and, therefore, any attempt to evaluate the effect of the media on violence requires a different, more general approach than that employed in the United States.

In view of this major consideration, a practical, multiple research proposal was adopted. While the approach had to be comprehensive, it was extremely limited by the amount of time and especially funds that could be made available. While the effect of the media on violence was to be the topic, in Canada the data had to be analyzed for both variables. While the setting was to be Ontario, we were asked to place the data in a comparative international setting. While strict social science requirements were to be met, we were to generate practical policy recommendations.

All of these requirements led us to adopt what we term a pyramidal approach. Beginning with the general literature discussed in Chapter 1, we proceed to outline the impact of the media on 18 nation states and Canada. At the next stage, relations between the media and violence in Ontario are discussed. In such a pyramidal approach different methods had to be imposed on various sections of the report, so no single research design was possible. The following list summarizes the approaches:

Chapter 1—Conjectures and Problems in the Literature. In this chapter we summarize the concepts, approaches, and conclusions presented in research in this field.

Chapter 2—International and Canadian Data Analysis. In this chapter we examine the relations between media and violence in the 18 countries that have a free press and a level of economic development similar to Canada's. Several data sets on domestic conflict exist, but this is the first direct attempt to study whether or not the variation in media affects variation in this phenomenon. After placing Canada in this international context, the chapter examines the historical occurrence of violence in this country and also illustrates how Ontario and Quebec violence fits into the Canadian milieu.

Chapter 3—Violence and the Prime Medium in Ontario. In this chapter we attempt to determine how much and what kind of violence is reported in Ontario. The print medium is the chosen field and 150,000 pages of *The Globe and Mail* for the years 1965 to 1975 are examined. One hundred and twenty-nine cases of collective violence, involving at least 50 people, and nine cases of individual political violence were reported in what is purported to be Canada's leading newspaper. Using the methods of content analysis, we evaluate the extent and variety of coverage accorded these events by this major news source.

Chapter 4—Case Studies and Illustrations. From the 129 cases, we chose six for intensive examination. The seventh case study was drawn from the list of individual acts of political violence. These seven events represent the various types of collective conflict and violence, and all received extensive media exposure. The case studies include: an anti-Nazi demonstration in Toronto in 1965, a police-hippie confrontation in the Yorkville district of Toronto in 1967, an anti-Vietnam war demonstration in front of the United States consulate in Toronto in 1970, a labour strike at the Texpack plant in Brantford in 1971, a personal attack on Premier Kosygin during his tour of Parliament Hill in 1971, an anti-Soviet demonstration at the Ontario Science Centre during Premier Kosygin's visit to Toronto in 1971, and a clash between native Indians and the Royal Canadian Mounted Police on Parliament Hill in 1974. Three newspapers – *The Globe and Mail*, *The Ottawa Citizen*, and *The Toronto Star* – were examined for each of the cases to evaluate their treatment of these events. Regarding each case, we also interviewed a number of participants, police, and newsmen about how the media handled the events. The question to be answered in this section was not whether the media caused violence or how much violence was in the media, but if the presence of the media affected the events, their sequence, and their consequences.

Chapter 5—Basic Conclusions and Recommendations. The basic conclusion is that although there is inconclusive, contradictory, and insubstantial evidence to support the idea that real-life violence is caused by media violence, there is evidence to support the view that on occasion the media can, and do, exacerbate some conflict situations. This conclusion suggests the need for practical reforms in police-media relations.

Chapter One

Conjectures and Problems in the Literature

Adult Canadians have all witnessed incidents of collective conflict and violence, such as the student protests of the 1960s and the war in Vietnam. Extremely few, however, have witnessed these or similar events in reality. The vast majority watched them on television, heard about them on the radio, read about them in the newspapers, or were informed by their friends and acquaintances. Clearly, most of our information about such violence is received from an intermediary body – be it acquaintances or the media – and it is likely that our personal contacts will have received their knowledge from the media.

The effects of such communications on individuals and society have long been recognized as significant for the political system. While specific consequences are difficult to isolate in the web of other social events, it is certain that most citizens rely heavily on the mass media for their information about Canada and the world. Richard R. Fagen, author of *Politics and Communication*, shows how a bizarre hoax to convince Americans that the President was dead could be carried out successfully by only 2,000 mass media personnel.[1] In Canada we only need to recall the "communication war" between the *Front de libération du Québec* and Prime Minister Pierre Trudeau over the Cross and Laporte kidnappings to realize how we experience such important events.

A less contentious example may be drawn from the work of a foremost student of the media. Walter Lippman's *Public Opinion* reads:

There is an island in the ocean where in 1914 a few Englishmen, Frenchmen, and Germans lived. No cable reaches that island, and the British mail steamer comes but once in sixty days. In September it had not yet come, and the islanders were still talking about the latest newspaper which told them about the approaching trial of Madame Caillaux for the shooting of Gaston Calmette. It was, therefore, with more than usual eagerness that the whole colony assembled at the quay on a day in mid-September to hear from the captain what the verdict had been. They learned that for over six weeks now those of them who were English and those of them who were French had been fighting on behalf of the sanctity of treaties against those of them who were Germans. For six strange weeks they had acted as if they were friends when in fact they were enemies.[2]

The actual effects of the media on Canadian society may not be easy to determine, but the circumstantial evidence for their importance in collective conflict and violence is great. The Special Senate Committee on Mass Media, chaired by Senator Keith Davey, found that adult Canadians spend 30 to 40 minutes daily reading their newspapers and that eight out of every ten of them use all three media – newspapers, radio, and television – on a daily basis.[3] Of course, these surveys mask different levels of interest and concern across the population. As T. Joseph Scanlon put it: ". . . that some persons watch a truly staggering 53.9 hours of television a week should not obscure the fact that others average only 4.8 hours."[4] Collective conflict events in particular are normally experienced only vicariously through the mass media. Regional studies have confirmed this contention. An Ottawa-Hull survey showed that four-fifths of the population learned about the murder of former Quebec Labour Minister Pierre Laporte in 1970 directly from the media.[5] Carleton University journalism students found that two-thirds of their sample population in Kingston learned directly from the media that kidnapped British diplomat James Cross had been found.[6]

To assert that the media are important to society is not, however, to determine in what way there are relationships between them. It is difficult to establish in a convincing fashion exactly how the mass media shape behaviour. Most scholarly work in political science indicates the complexity of relationships between the media and general political behaviour.[7] And, in a similar manner, communications literature shows a complex interactive pattern between the mass media and its effects.[8] Modern mass media have not displaced personal contacts, face-to-face communications, or other channels of communication, but they have provided new links to existing networks and offered independent forms of communication. Therefore, to single out the effects of the media on collective conflict and violence is going to require the skills of social scien-

tists for generations and early definitive success cannot be expected.

The Media and Violence

Complex social reality is unlikely to be "explained" by any single factor such as the media. The allegation that the Commission cannot establish that the media are *the* cause of violence is really rather premature.[9] The 1972 report of the United States Surgeon General's Scientific Advisory Committee, based on 60 reports and a million dollar expenditure, was not able to do that either.[10] But that report and others,[11] undertaken independently or on government contract, have provided insightful hypotheses and have established a basis for the need to continue probing into such relationships. If public policy is to be based on the best social science available at any given time, then despair about the difficulties of discovering ironclad relations between violence and the media cannot be allowed to prevent efforts to establish tentative generalizations.

The study of violence itself is replete with theoretical, philosophical, and political difficulties. If causal relations ever were established between media output and violence in society, it would have immediate policy consequences. Benjamin D. Singer put it this way: "Some would have argued that reportage of such events, particularly the dramatized reportage so prevalent on television, is a determinant of such events as air hijacking, arson, bombings, mass murders, campus disturbances, and urban riots. The policy implications of this question are enormous and ultimately become matters of political philosophy."[12] However, even if causal relations are not established in a conclusive, scientific manner, the issue is already part of public discussion as the Commission has shown through its public hearings. Contrary to the views of some scholars, negative findings in this field will also have policy implications. Research grants may vanish, but the policy considerations do not disappear merely because social scientists find no positive correlations.

The Commission has taken a rather broad definition of violence in order to make their scope as comprehensive as possible. They have taken as their definition the following:

Violence is action which intrudes painfully or harmfully into the physical, psychological or social well-being of persons or groups.

Violence or its effects may range from trivial to catastrophic.

Violence may be obvious or subtle.

It may arise naturally or by human design.

Violence may take place against persons or against property.

It may be justified or unjustified, or justified by some standards and not by others.

It may be real or symbolic.

Violence may be sudden or gradual.[13]

Such a broad concern is justified in order to provide an exhaustive treatment of the subject, but it must be restricted for specific research purposes. Social science requires that definitions be operationalized so that empirical referents can be determined. Moreover, many definitions tend to assume that violence is not part of the normal fabric of society. Collective conflict and violence occur with such frequency that they cannot be regarded as aberrations. Disorder may not be the norm of Canadian society, but neither is it rare in political systems. H.L. Nieburg, in his volume *Political Violence: The Behavioral Process*, argued:

Extreme and violent political behaviour cannot be dismissed as erratic, exceptional, and meaningless. To set it apart from the processes that are characteristic of society is to ignore the continuum that exists between peaceable and disruptive behaviour; it is to deny the role of violence in creating and testing political legitimacy and in conditioning the terms of all social bargaining and adjustment. Violence in all its forms, up to and including assassination, is a natural form of political behaviour.[14]

One does not need to accept the contentious judgment of the author of this quotation to understand that there is some merit to the argument that the role of violence in society may be considered "good" or "bad" depending on the ideology, the motives, and even the success of the perpetrators. Crime, itself, is a political concept according to many writers.[15] However, even if definitions are coloured by ideology, public officials must learn to deal with the short-run interference in democratic processes and the personal harm that emanate from violence. One instrumental approach to the philosophical problem is to restrict the definition to harmful violence. Nieburg, for example, who wishes to show that violence is merely another instrument in politics, defines it as:

acts of disruption, destruction, injury whose purpose, choice of targets or victims, surrounding circumstances, implementation, and/or effects have political significance, that is, tend to modify the behaviour of others in a bargaining situation that has consequences for the social system.[16]

While this type of definition is helpful for making the concept of violence as wide as possible and for diminishing the use of the term to depict only erratic or deviant behaviour, it is not very useful either for the science of violent behaviour or for public policy debate. There is simply no way that we have found to operationalize this definition to provide measures of collective conflict and violence in order to carry out empirical research. Moreover, in this report we wish to steer the discussion away from whether such behaviour is beneficial or harmful in the long term, but to ascertain what relations exist between the media and this phenomenon. Thus, while this report will initially focus on the relationship between the media and the phenomenon of collective conflict in general, it is our ultimate intention to concentrate on the violent aspects of conflict. Conflict is used here as a generic term to connote the entire spectrum of confrontation politics. It

may be legal or illegal, violent or non-violent, but it always implies the threat or use of physical force. Violence, on the other hand, entails the actual use of physical force. In later chapters this definition will be operationalized in order to measure levels and types of collective conflict and violence.

Research Survey

A simplistic formulation of the essential research problem is: does media coverage of violence cause violence? Of course, a researcher cannot expect such a simple pattern to exist in the real world. Such an assertion implies that media presentation is both a necessary and sufficient condition for violence. Obviously, other factors – such as social conditions, deprivation, expectations, motives, et cetera – are significant as well. Moreover, in order to use statistical approaches the formula must read: does variation in media presentation of violence effect variation in real violence? On the assumption, however, that all the media do is report accurately real-life violence, then the problem becomes even more complex, as it may be that violence in the real world causes more violence in both the media and the world. In such a case, the media are not producing any violence, they are merely presenting a picture of how violence generates more violence.

Another contention of research in this field is that the media do not depict all events in society, but select only a few, and of these even fewer are received by the audience. Links in the selection chain are difficult to disentangle, but in order to hold the media responsible for violence in the world their precise and singular effect must be demonstrated.

Efforts to handle these hypotheses and assumptions have produced volumes of materials and propositions. The literature, however, is diffuse, as it runs across several disciplines and is often contradictory. Ideally, if public policy decisions are to be made on the basis of research, the findings must at least be consistent. Let us now focus on the established research in order to determine what Canadian research is warranted, and how we should proceed.

Laboratory and Experimental Research

More experiments have shown that aggressive behaviour, and probably later violence, is increased by the witnessing of media violence than have claimed the contrary, but results are not conclusive.[17] Such research indicates that many people, but not all, are affected significantly by different types of violent media content. The implications to be drawn from the research have divided researchers into conflicting camps and schools. A brief submitted by the Ontario Psychological Association to the Royal Commission stated unequivocally that it has been clearly demonstrated that violence presented in the media increases aggressive and probably later violent behaviour of consumers.[18] Albert Bandura,[19] Leonard Berkowitz,[20] and Frederic

Wertham,[21] while somewhat more cautious in the interpretation of their findings, have concluded that there is a strong case for asserting that there are adverse behavioural effects from media violence. Originally, Seymour Feshbach[22] concluded that viewing aggression could have cathartic value by releasing tensions that might otherwise have led to overt aggression. Robert M. Liebert[23] found precisely the opposite: he concluded that television viewing did not produce a cathartic effect. Moveover, another group of scholars has argued that current evidence about the relations between the media and violence is inconclusive. This view is typified by the research of Joseph Klapper[24] and Walter Weiss.[25] Still others have concluded that media violence may have an effect on potentially criminal adults[26] or on "social misfits", as those perhaps more prone to violent behaviour are more likely to view violent programs.[27] The effect of punishment in the media may also be significant. Bandura[28] has argued that if the media presented anti-social aggression being punished, it might inhibit imitation of the acts. In this line, one researcher thinks television programming during the 1970s may have inhibited imitation because "TV crime is almost always unsuccessful."[29]

There are problems of measurement and comparability in all of the laboratory studies, but on the whole they meet the test of internal validity better than all other forms of research in this field. That is to say, the relation between cause and effect is reasonably clear and irrelevant causal factors are controlled. The laboratory work is inconclusive, however, both because the studies were conducted immediately after the viewing of programs and therefore did not address themselves to questions about the retention of the image of violence, and because the laboratory is always an artificial environment whose relevance to real-life situations is questionable. As Anthony G. Greenwald put it in his discussion of research: "In short, the laboratory conditions under which witnessing aggression is known to increase aggression differ somewhat from the life conditions typical of television-viewing children."[30] The same could be said of all the laboratory research.

On the whole, then, the results of research – even that of the United States Surgeon General's Scientific Advisory Committee – have been inconclusive. Even when the violence studied in the media was only about news the same results have been found – contradictions in the literature. Possibly the most agreed-upon conclusion is found in Greenwald's contention that: "The audience for which we need particularly to be concerned about the effects of crime-relevant news communications consists of those who have low internalized restraints against committing the depicted crimes."[31] Another scholar, Colin Seymour-Ure, examined the literature on mass media effects on violence only to conclude: "Different research projects are equivocal about this; but some suggest no more than that latent violence may be made manifest by

media among a small minority of audiences."[32] In other words, before public policy judgments can be made, we need to know what the internalized norms of society (or groups within it) are in order to know how media presentation will affect them.

The conclusion to be drawn from these findings is that only studies of real-life situations will complete the analysis in order to project policy ideas onto the stage for public debate. It is interesting to note in this regard that neither the Eisenhower nor the Kerner Commission found that the media were a major factor in causing collective conflict and violence. They did, however, level serious charges at the media about the handling of such phenomena.

Field Studies

The methods of content analysis, survey research, aggregate data, and case studies have all been used in attempts to establish the effects of the media on violence. The difficulty with all of them derives from the impossibility of controlling all social variables in order to establish the precise independent effect of the media. Thus, unlike the laboratory studies, they do meet the criterion of what might be termed "external validity", but not that of "internal validity". The second difficulty derives from the simple fact that the public is not homogeneous. The idea that the media are like hypodermic needles which can be employed to inject the mass public continues to plague research in the field. The factors of selective perception, retention, value systems, and personality characteristics all mediate the effects. Societies do not react as one organic whole to stimuli from the media or anything else. Moreoover, researchers have also found that informal social relationships, opinion leaders, and similar group variables play roles in mediating between mass communication and attitude formation.[33]

Human networks as well as the media convey information and other messages. Katz and Lazarsfeld describe this process as the two-step flow of communications: ideas are taken from the media and passed along networks of people.[34] In Canada, Scanlon has shown that during crises these people networks can be traced; he found 39 chains of individuals and seven stages in this second communication step, but almost all could be traced back to the media.[35] For a study of social conflict it is also important to bear in mind that such communication paths may change with the intensity of the issue, and, consequently, in violence situations different paths may be taken. When President John Kennedy was assassinated 49 per cent of the population first discovered the news from another individual.[36]

A. Content Analysis

Are the media neutral or do they screen out certain events and emphasize others? Analysis of the content of media messages has confirmed that the mass media

extensively use violence in real and fictional ways. Content analysis may not indicate how the media affect people, but it does describe what the media are presenting to their audiences. In other words, content analysis indicates what media officials believe their audiences wish to have communicated. It cannot be argued that advertisements "sell" products, but that substantive entertainment programs and news substance are not being "sold" to the public. Reporters and broadcasters obviously believe that violence "sells". Whether or not the audience "buys" the product of advertisement or issues presented on entertainment and news programs cannot be answered by content analysis. However, an assumption of content analysis research is that if owners expect advertisements to affect consumption patterns, then it can be assumed that all media communications affect other forms of behaviour.

Two different types of content analysis are employed by researchers. The most frequent is simply a description of the output and classification of media products to bring out some analytic characteristic. The essential argument is that there is an agenda-setting process in the media which exerts influence on the public by choosing certain issues to emphasize or omit in presentation and editorial comment. This is often referred to as events data. The second, called inferential content analysis or evaluative assertion analysis, is an attempt to deduce the sources, attitudes, presuppositions, et cetera, behind the simple descriptions. In such research it is often assumed that inferences can also be made about audience reception of the messages. These messages presumably suggest, compel, or otherwise affect audience response. Such inferences, however, are extremely tenuous; there need to be independent estimates of their validity by survey-research or case-study techniques.

In the study of television output, there is almost unanimous agreement about the existence of high violence content. Practically every study in the report entitled *Mass Media and Violence* and the five volumes from the United States Surgeon General's Scientific Advisory Committee confirmed this contention. George Gerbner and the Annenberg School of Communications, for example, concluded:

The world of television violence is a place in which severe violence is commonplace . . . . At the very least, it can be said that the messages being sent about violence are inconsistent with a philosophy of social behaviour based upon involved cooperation, non-violent resolution of conflict, and non-violent means of attaining personal ends.[37]

This particular report does not examine television or radio, but there are theoretical reasons for believing that in the field of collective conflict and violence the print medium is equally as important as these subjects. In fact, as far as the agenda-setting hypothesis is concerned, there is evidence that the broadcast media use the product of the print medium. The foremost specialist on the American news media, Ben H. Bagdi-

kian, put it this way: "Instead of creating a comprehensive news system that offers a service independent of the printed news networks broadcasting uses the product of the printed news . . . ."[38] Examinations of the Canadian media have come to exactly the same conclusion: newspapers play a key role in preparing the messages which are disseminated by other media channels.[39]

Findings about the content of the print medium are extremely extensive, but we can summarize some of the main conclusions. It has been reasonably confirmed that the content of American newspapers includes about 10 per cent on crime and accidents. Probably the most precise assessment is that about one-tenth of the non-advertising content of United States dailies was concerned with "violence" in the 1939 to 1950 period; it varied in the 1960s from 2 to 34 per cent, and no reliable data has yet been processed for the 1970s.[40] Conclusions about the effects of this violent content are, however, tenuous. One of the Eisenhower reports assessed the situation in these terms: "There is no rigorous evidence, one way or another, as to whether violence in the print media has been beneficial, harmful or no effect in the real world . . . . Best guess: It is more likely that media-depicted violence has an undesirable 'triggering' effect than that it has a desirable 'catharsis' effect. This triggering function is probably only operative among some small fraction of the population who have predispositions toward such violence in the first place, and even then only under certain restricted circumstances."[41] Content analysis can provide important information about violence in the communications industry, but no one has been successful in scientifically indicating its effects by inferential methods.

B. Aggregate Data and Survey Analysis

The artificiality in experimental research is offset by work in the comparison of real-life data and the examination of aggregate data. In this method of investigating the relations between violence and the media, attempts are made to account for the variations in the rates of occurrences of some behaviour – in this case, levels of violence – by some other variables that have not been artificially created. We should not expect simple, single-direction explanations, because the mass media operate as part of a complex network of factors and to show their independent contribution is difficult – many would say impossible. Moreover, lack of a basic model for the behaviour of whole societies and the inability to control all external variables limits the predictive power of such correlational studies, but they are required to confirm whether or not the experimental research is related to reality and to generate further propositions that may be tested under laboratory conditions.

Attempts to measure the amount of crime and/or violence and to show how it correlates with the media have been quite frequent in American social science

literature. The basic data employed in the United States have been Uniform Crime Reports, and they show that crime has been on the increase since the nineteenth century, especially in the 1960s. Attempts to show that there are significant statistical relations between this data and that on violent content in the media have usually failed. George A. Comstock summarized his researchers' conclusions as showing no "meaningful correlation" between the trend in all forms of media and the rate of real crime as measured by the Uniform Crime Reports for the years 1933 to 1968.[42]

This conclusion does not end the question about effects. In the same research Clark and Blankenburg, in a study of the attention given to violence, found that "newspapers reflect the violence of the real world."[43] While Deutschmann had found great variation in the amount and kind of violence reported in various New York dailies,[44] S. G. Levy, after an examination of 6,000 issues of American newspapers published from 1819 to 1968, argued that the trends in newspaper content fairly accurately reflected real violence in America.[45]

Even if a relationship were found and the conflicts and the methodological weakness in the studies were eliminated, there would still remain the chicken-and-egg question about whether the media affect levels of violence or merely reflect it. The strongest assertion that the media instigate violence is found in Berkowitz and Macaulay's contagion thesis. These authors found extraordinary jumps in criminal aggression in the United States following John F. Kennedy's assassination and the Speck killings.[46] The results were suggestive of a validation of the thesis, but that was all. Their contagion thesis has been attacked on practically every ground – philosophical, methodological, and even on the data themselves.

The roughest attack came from H. L. Nieburg who declared sarcastically that the contagion theory is obviously correct! Imitation, fadism, mimicry, socialization and experience itself all came before the television set. As Nieburg conceives it, we would not have had any violence or revolutions in the past (that is, before the existence of mass media) if the contrary argument were to hold. If the contagion thesis were taken at face value, then societies would have totally collapsed everywhere in a tumultuous period of contagious violence in which the media caused violence which in turn caused more media violence. Nieburg concludes: "This doctrine attracts not only besieged public officials who require a scapegoat but also the media men themselves, for whom it tends to confirm and inflate their claims of importance – and their revenues."[47] Furthermore, although there have been several empirical attempts to examine the contagion hypothesis, methodologists claim even more basic criticisms. Desmond Ellis makes two valid criticisms. First, the police may have upgraded their categories of violence after the Kennedy assassination and the Speck killings and rendered the data non-comparable. Second,

if Berkowitz were correct, there should have been an increase in crime among Canadians after these tragic events, because they were equally exposed to the same violence in the media at that time; but he could find no such evidence in the equivalent Canadian data.[48]

In short no one who has used real-life data has found a natural law about the relations between the media and violence. As the leading students of this relation between real and media violence put it in their examination of all American data for the United States Surgeon General's Scientific Advisory Committee: "Intervening naturalistic and normative factors prevent a cataclysm; some people, for example, never receive the violent message, some don't understand it, and some (most, one hopes) inhibit themselves from imitating the event."[49]

The lack of ability to find the media responsible will not surprise scholars and should not upset the public, since it is extremely rare that single variables are found to account for a behaviour pattern as widespread as the use of violence. Moreover, the studies have discovered other information of corollary interest. In television programming, for example, we know that the entertainment world of violence is unlike the real world of violence. Survey research on television viewing shows: "The norms for violence contained in the television world are in stark contrast to the norms espoused by a majority of Americans."[50] For example, television programs stage most violence as between strangers, while in fact most violence is between acquaintances.[51] When the Eisenhower Commission found that the "more violence prone types" also watched more violent programs, it concluded: "The high degree of coincidence between preferences for media violence and experience with actual violence, coupled with norms in support of such acts suggests that the television world of violence has the capacity to reinforce 'violents' in their beliefs and actions in the real world."[52]

Surveys on television viewing and its actual effects on aggressive behaviour are contradictory. The earliest studies by Schramm, Lyle, and Parker[53] found no association, but the Lefkowitz[54] and the McLeod[55] studies found moderately positive associations between exposure and aggressive behaviour. Interpretations of these research findings also differ. Liebert[56] interprets these studies as having demonstrated a causal relationship, while Ellis finds this contention invalid on the ground that only the most "extreme" subjects could have accounted for all the variation present in the data.[57]

The results of all this work on aggregate data and the accompanying surveys is mixed.[58] The relations between real violence and media exposure and among real violence, media, and attitudes have not really been determined. The Eisenhower Commission summarized all the findings as indicating a reciprocal relationship between norms of behaviour and experience; that "many of the 'violents' in experience are also high

approvers of violence and vice-versa."[59] No research since that period has convinced us that causation has been shown to exist between media exposure and violence in real life. The best materials remain in the laboratory studies with their concomitant difficulty of overcoming their artificiality. They prove little about what to do about the mass media in the real world. If there is some evidence about causation in the laboratory studies but only hints in the aggregate data and survey-research projects, then particular cases should be examined. Such research will not meet all the canons of physical science, but its descriptions and illustrations may help to sort out some of the conflicts in the literature and help to make policy decisions.

C. Case Studies and Illustrations

None of the Eisenhower, Kerner, or Surgeon General's reports was able to establish that the media cause violence, but the latter provided some weak associations and the Kerner and Eisenhower reports provided interesting heuristic examples. The following samples, selected for their interest and possible relation to Canada, should suffice to illustrate research in this field. The object is not to prove cause-and-effect relationships but to illustrate how the media may exacerbate problems and create news about violence which masks the real message that dissidents and authorities are trying to convey.

A newspaper reporter equipped with pencil and pad subtly influences the event he is covering; a still photographer with his cameras dangling about his neck may change it more. And a television camera crew, with their lights and large equipment, can transform the event into an entirely different scene. So much so, in fact, that it is questionable if TV is capable of reporting the news objectively.[60]

By now it was something after 8 p.m. and the television crews needed something to show on the 10 o'clock news . . . . Up came the three-man television crew: a camera man with a hand-held camera, a sound man and a light man. Very discreet in the dark.

"May as well get it."
You could sense the disappointment in his voice, because pictorially it wasn't much of a demonstration. The light man held up his 30-volt frezzi and laid a four-foot beam of light across one section of the picket line. Instantly the marchers' heads snapped up, their eyes flashed. They threw up their arms in the clenched Communist fist. Some made a V with their fingers, and they held up their banners for the cameras. . . .[61]

Conflict between the police, who want to maintain or restore order, and reporters, who wish to provide full coverage of a volatile event, does arise as it did in Chicago. Mayor Daley and the Chicago police accused the media of interfering with the maintenance of order. Newsmen, in turn, complained of excessive restrictions on their coverage. That there is some truth to both complaints makes the problem no easier to resolve.[62]

Many protest organizations have their own cameramen and some persons were impersonating television network newsmen in Chicago. Nothing, it is clear now, pleased some demon-

strators more than indiscriminate police violence toward the news media.[63]

If destructive and fatal riots occur in American cities this year, a major share of the blame must fall upon the shoulders of sensational 'journalists' and overnight pundits of the press who are assiduously stoking the fires of unrest. Quoted by Quinn Tamm, Executive Director of the International Association of Police Chiefs.[64]

This view is not held only by policemen. The following is the view of two leading scholars.

Again we are dealing with a process of social learning, especially for potential participants. Rioting is based on contagion. The process by which the mood and attitudes of those who are actually caught up in the riot are disseminated to a larger audience on the basis of direct contact. Television images serve to spread the contagion patterns throughout urban areas and the nation. Large audiences see the details of riots, the manner in which people participate in them, and especially the ferment associated with looting and obtaining commodities which was as much at the heart of riot behaviour. Television presents detailed information about the tactics of participation and the gratifications that were derived . . . . The media disseminate symbols of identification used by the rioters and their rationalizations. The mass media serve to reinforce and spread a feeling of consciousness among those who participate or sympathize with extremist actions, regardless of the actions' origins. In particular, television offers them a mass audience far beyond their most optimistic aspirations.[65]

The above quotations do not constitute a scientific sampling of opinions in case studies about the effect of the media on violence. They do, however, illustrate that some scholars, media personnel, and participants in violence believe that the media do contribute to the process of violence. In all the American cases, concern was expressed over how the media's coverage of demonstrations and riots provides publicity for the acts of participants whether they are insurgents or policemen. The method of coverage may have an influence on the behaviour of everyone who is either recorded by, or receives the message from, the media.

Conclusion

After surveying the conflicting evidence about media effects from these various methodologies, the researcher is left somewhat bewildered. Possibly J. D. Halloran best summarized the feeling when he wrote:

The student is confronted by a veritable avalanche of relevant variables (predispositions, subjective perception, retention, selection, contextual organization, image of source, group membership, activity of opinion leaders, class membership, level of frustration, family background, educational level, availability of social mechanisms and nature of the media to name a few) and it is perhaps not surprising that a preliminary survey of the field leaves one with the impression that we have not advanced very far.[66]

Halloran's ten-year-old statement remains valid today. The totality of research tends to ask, "Do the mass

media cause discernible effects on audiences?", and the inevitable answer is "It all depends." The media do not inevitably produce effects, but there is no doubt that they are significant in the process. William R. Catton puts the view clearly:

If it has not been demonstrated that mass communications can regiment the population, or that these media have corrupted our society, neither has it been proven that they are inherently (or at least under our free enterprise system) harmless.[67]

While a number of evident discrepancies exist, there does seem to be general agreement that the media are saturated with violence. Unfortunately, there is little consensus on the societal impact of this phenomenon. Although social scientists argue that the entertainment media convey norms of violence as a means of conflict resolution, not one would argue that the media are the sole or prime determinants. Moreover, despite the vast amount of research that has been carried out in this field, it has proven impossible to make unambiguous, causal inferences about the relationship between the media and real violence. To date the research has been inconclusive and is replete with inconsistencies. Experimental, aggregate data, survey research, and content analysis studies are found to be remarkably discordant in the conclusions they reach about the media and real violence. There seem to be, however, three discernible viewpoints that emerge from the literature. Some social scientists believe that the media can stimulate aggressive tendencies which under certain conditions can lead to aggressive, and possibly violent, behaviour. Others believe that the more violence-prone groups or individuals in society are likely to be most affected by violence in programming and print media. Finally, there are some scholars who argue that while the media may not cause violence, they definitely exacerbate collective conflict and violent situations. These conclusions are based almost uniquely on American data, and on American constitutional, procedural, organizational, and cultural considerations. In this report we wish to determine which of the above conclusions are valid for Canada and what policy decisions should be taken.

Chapter Two

International and Canadian Data Analysis

The first part of this chapter presents an analysis of the relationship between mass media and collective conflict in a comparative international setting, utilizing the aggregate data technique currently employed in social science research. In the second part, the focus shifts to a consideration of the data on conflict and violence in Canada, both in an historical and contemporary perspective. The peaceable kingdom myth is characterized as an exaggeration, and violence in Canada is placed alongside that of other countries for comparative purposes. Together the two parts help to confirm the basic conclusions from Chapter I, set the examination of Canadian and Ontario violence in a wider context, and provide a backdrop for later discussions of seven cases of collective conflict and violence.

International Data

In recent years, a considerable amount of energy has been expended by social scientists in an attempt to determine the social and psychological conditions underlying collective conflict and violence. As a result, there currently exists a substantial body of literature on the causes of this phenomenon – ranging from broadly based presidential commission reports to a few very sophisticated attempts at causal modelling.[1] In line with the proposition that comparison is the essence of social science, a great many of these studies have taken a cross-national or cross-polity perspective; that is, they have attempted to isolate the causes of civil disorder by examining variations in the level of collective conflict among different samples of nations and by relating these variations to socio-economic and demographic factors through the utilization of a number of statistical techniques. As a result of such studies, this phenomenon has been variously attributed to such general psychological facts as relative deprivation,[2] as well as to more specific social and demographic factors such as cultural and ethnic divisions,[3] the destabilizing effects of rapid economic growth,[4] government repression,[5] income and land inequalities,[6] crowding,[7] and numerous combinations of these and other variables.[8]

During this same period, as indicated in Chapter I, there has also existed, particularly among social psychologists, an interest in the effect that exposure to media violence has on behaviour. The current experimental literature is replete with studies indicating that such exposure not only frequently provides the exposed individual with a model for aggressive behaviour, but in some instances can also inculcate a person with predispositions to, and justifications for, such activity. As a result there has been a great deal of concern about the social effects of the violence presented by the mass media. This concern has been greatly augmented by the fact that the media, especially television, are now considered by many scholars to be one of the predominant agents of socialization.

Despite the public concern and scholarly musings over these two subjects, there has not been any direct attempt to examine the effect of media exposure in the various analyses of collective conflict and violence.[9] Although a number of communications variables have been used in some studies, they have been employed solely as an index of the level of social modernization in a country, and have not been examined as a contributory factor in themselves.[10]

The first part of this chapter will, therefore, attempt to examine the relationship between the mass media and collective conflict and violence on a comparative basis. The relationship to be tested will be a derivation of what has sometimes been referred to as the hypodermic hypothesis. This proposition assumes that all media are "saturated" with violence, and that the larger the "dosage" of media exposure the greater the subsequent behavioural effect. Thus, the amount of violence and the amount of media in countries should correlate. While this latter assumption may seem overly behaviouristic in that it presupposes a mechanistic and homogeneous response and ignores any individual input on the part of the communications receiver, it does conform to the research task required by the Commission.

The Media

Creating an index of media exposure has been greatly facilitated by the extensive research that has been undertaken on communications structures and

modernization,[11] and by the fact that communications data are relatively abundant. The communications data used in the construction of the present index have been derived from the *Taylor and Hudson World Handbook* data set.[12] The items employed and the base year for the data were the following:

1. Newspaper circulation per 1,000 population, 1960[13]

2. Radio receivers per 1,000 population, 1960[14]

3. Television receivers per 1,000 population, 1960[15]

4. Cinema attendance per capita, 1960[16]

In combination, these measures serve as an adequate reflection of the extent to which media structures in any country are present for the purpose of informing and socializing a population. It should be noted that such general measures overlook the importance of such factors as interpersonal communications and personal characteristics, which have been singled out in Chapter I.[17] Unfortunately these factors are not easily quantifiable, but in any case, they are not integral to the examination of the hypothesis of this chapter.

The Sample

As it is the function of this Commission to investigate the impact of the mass media on violence in a Canadian context, the countries in this sample were selected on the basis of their resemblance to the Canadian experience in terms of their level of development and the character of their communications industry.[18]

Table 1

The Relationship Between Level of Economic Development and Level of Mass Media Development*

	Economic development	
Newspaper circulation per 1,000 population	.81	(118)
Radio receivers per 1,000 population	.90	(119)
Television receivers per 1,000 population	.83	(91)
Cinema attendance per capita	.51	(95)

* In this table the upper figure in each row is the product moment correlation coefficient, and the lower figure in parenthesis is the number of nations on which the correlation is based.

As Table 1 indicates, the availability of mass media, as measured by the four component indicators (newspaper circulation, radio receivers, television receivers, and cinema attendance) is largely a function of economic development.[19] With the exception of cinema attendance, all the media indicators are highly correlated with this factor.[20] Over and above the level of

media development, consideration was also given to media character – particularly the political constraints under which a country's media operate. It would seem a valid assumption that the content of the media and its subsequent impact are largely contingent on the political environment. An effort to allow for this factor and to further "Canadianize" the sample population was made by introducing a press freedom variable into the sample selection process. This variable was based on an index created by the University of Missouri School of Journalism and measures the freedom of a country's broadcasting and press system to formulate independent opinions and to criticize its own local and national governments.[21] Conversely, the Press Freedom Index is also intended to reflect the ability and willingness of a government to withstand potentially adverse criticism and might therefore be interpreted as a measure of the level of democratization existing in a country.

Table 2

The Relationship Between Media Development, Economic Development, and Press Freedom*

	Press freedom	
Economic development	.24	(87)
Newspaper circulation per 1,000 population	.38	(87)
Radio receivers per 1,000 population	.37	(86)
Television receivers per 1,000 population	.30	(74)
Cinema attendance per capita	.16	(72)

* In this table the upper figure in each row is the product moment correlation coefficient, and the lower figure in parenthesis is the number of nations on which the correlation is based.

It is quite interesting to note that although the media in Canada are both extensive and independent, in other countries these two characteristics are not necessarily related.[22] In fact, as Table 2 indicates, there is little correlation between the level of media development and media freedom. Correlatively, there is little relationship between economic development and media freedom or democratization as some analysts previously have assumed.[23]

Based on these economic and media considerations, a sample of 19 countries was selected for analysis. All countries selected ranked among the top 30 in the *Taylor and Hudson World Handbook* data set (N = 136) in terms of both economic development and press freedom. The countries employed in the analysis are

Canada, the United States, Sweden, Switzerland, Denmark, Australia, New Zealand, France, West Germany, Norway, the United Kingdom, Belgium, Finland, The Netherlands, Austria, Italy, Venezuela, Ireland, and Japan.[24]

Comparative Collective Conflict

An attempt has been made in this section to limit the use of the term "violence" because of the semantic pitfalls that this word entails.[25] In later chapters we will come "closer" to the data and specifically examine violence data only. In this chapter, the focus will be on what might be called collective conflictive behaviour. This phenomenon can be both violent and non-violent and is not necessarily anti-systemic, or anti-status quo, although it is in all instances extra-parliamentary.

Collective conflict has been operationalized here using six conflict event variables derived from the Taylor and Hudson data set.[26] The following event variables, selected from the data file, measure both the extent and intensity of domestic conflict and violence:[27]

1. Riots – Any violent demonstration, or clash of a large group of citizens. Violence implies the use of physical force, and is generally evinced by the destruction of property, the killing or wounding of people (physical injury), or the use of riot control equipment. Riots are distinguished from armed attacks on the basis of whether the attack seems to have been organized, whether it is goal directed, or whether it involves all, or most, of the participants acting purposefully.

2. Armed Attacks – Acts of insurrectionary violence committed by, or involving, organized groups with weapons of any kind, when these acts are intended as protests, or acts of revolt, or rebellion against a government, its members, policies, intended policies, etc.

3. Political Strikes – Any strikes by industrial or service workers, or students for the purpose of protesting against a government, its leaders or a government policy or action.

4. Deaths from Political Violence – The number killed in conjunction with any domestic intergroup violence in the nature of armed attacks, riots, demonstrations, etc.

5. Anti-government Demonstrations – Organized violent gatherings of a large number of people for the purpose of protesting against a government, its actions or policies, or one or more of its leaders. Demonstrations that became riots are excluded.

6. Pro-Government Demonstrations – A gathering of people whose purpose was to lend support to a government, its policies and actions or to one or more of its leaders. This category also includes demonstrations for or against a foreign government, its policies, leaders, or visiting representatives which also show support or satisfaction for the demonstrators' own regime.

The inclusion of the last indicator, one which has been previously ignored as a conflict measure, is defensible given the scope of this study. It would seem that the virtual existence of pro-government demonstrations assumes or implies that there exists on the other hand a certain level of anti-government conflict or sentiment; otherwise such manifestations would be unnecessary.

Hence, as conflict necessarily involves a minimum of two parties, both pro- and anti-government demonstrators would be engaging in a form of conflict behaviour as challengers to, and defenders of, the status quo. A subsequent factor analysis bears out this relationship between pro-government demonstrations and other forms of conflict.

Data on each of the above conflict measures were obtained from the data set and aggregated into one 11-year time period encompassing the years 1955 to 1965.[28] The question of the interrelationship of these conflict measures is extremely important in that they can be, and have previously been, analyzed in a variety of different ways. Some studies have approached each of these indicators as discrete phenomena, that is, as conceptually unrelated. Others have attempted to analyze them in terms of a smaller number of underlying dimensions.[29] Although there are logical, and theoretically interesting, arguments for the first technique,[30] a factor analysis of a number of cross-national data sets of various sample sizes and time frames has usually supported the latter approach.[31] Factor analysis is normally relied on in such cases to give coherence to a variety of forms of conflict, with the factor labels subsequently becoming the conceptual phenomenon to be explained.[32] Thus, a great many quantitative analyses of domestic conflict have utilized this technique to reduce the complexity of language and events related to conflict to a parsimonious set of dimensions which indicate the underlying phenomenon.[33] This type of analysis has usually uncovered two underlying dimensions of domestic conflict. The first of these dimensions, which is often denoted as turmoil or anomic conflict, is indexed by riots, general strikes, and demonstrations. The other, which has been variously referred to as internal war, rebellion, or revolution, is characterized by such events as terrorism, deaths, and assassinations. The usual interpretation given to this differentiation is that terrorism and assassination, along with deaths resulting from collective conflict, are indicative of a different level and intensity of conflict than strikes, riots, and demonstrations. The relationship between the two dimensions has, however, remained for the most part, unspecified. It is assumed nevertheless, that each dimension presupposes a different set of preconditions and causal linkages. Therefore, if it were possible to discern two dimensions of conflict for this sample, it would not be improbable that the relationship of the mass media to each dimension would be substantially different. As will be seen, however, a factor analysis of the events data for this particular sample raises some question about the general applicability of such a dimensional division.

Before this factor analysis was employed, each conflict indicator was first logged.[34] Theoretically, this logarithmic transformation of each variable best stabilizes variance and, more importantly, maximizes linear relationships.[35] The transformed data were then factor-

analyzed. Although there is little consensus in the relevant literature on the optimum technique, many analysts have persuasively argued for a principal components solution in such a context; therefore this technique is utilized here.[36] It would appear evident from the results as shown in Table 3 that the principal components method was unable to distinguish the two purported dimensions of conflict behaviour with respect to the present sample. Rather, all the variables in this analysis load highly on the same factor, clearly suggesting that there exists only one dimension of conflict in these countries.

Table 3

Principal Components Analysis-Conflict Event Variables: 19-Nation Sample, 1955–1965

Variables	Factors[a]	
	I	II
Riots	.923	.200
Deaths from domestic political violence	.898	−.351
Armed attacks	.905	−.170
Anti-government demonstrations	.849	.480
Pro-government demonstrations	.914	.014
Political strikes	.896	−.152

[a]Block loading > .600

The uniformity of the results generated by this factor analysis suggest at the outset two alternative strategies. One approach would be to take the highest loading variable on factor 1, in this case riots, and use it as a representative variable.[37] While this strategy has frequently been employed in this type of analysis, it is considered by many analysts to entail unnecessary information loss. A more realistic and reliable approach would be to construct a composite operational measure by way of the summation of the data for all six indicators. Given the distribution of the component variables, a logarithm of this sum should provide the most appropriate composite index.[38] This index will hereafter be referred to as collective conflict. As well as the statistical reasons put forward for this collapse of the data into one index called collective conflict, this would also seem to best meet the test presented by the Royal Commission – to show whether or not media presentations affect the general phenomenon of "violence".

Analysis

In order to examine the hypodermic hypothesis with respect to the relationship of media exposure to conflict, two sets of regression equations will be employed. The first equation will examine the relationship of media exposure to the composite index collective conflict. A second series of equations will also be introduced to analyze the effect of media exposure on each of the individual conflict measures. This has been done because the composite measure may obscure the possibility of media exposure having different effects on the various forms of such behaviour.

An initial question arises concerning the treatment of the four media variables that we have proposed to use in the analysis. It is argued that "mass media" is really an indivisible concept in that its various elements substitute for, and reinforce, each other. Hence, it is felt that a problem frequently arises when an attempt is made to examine individual items. The overlap of functions (for example, newspapers, television, et cetera) makes it difficult to single out any one of the mass media as being a source of influence. Furthermore, the media have often been conceptualized as a unitary concept with the justification that the high degree of interrelationship of its components makes any one of it a possible substitute for the other.[39] While the essence of this argument is comprehensible, it is not without serious flaws. First, most of the psychological literature on media and violence differentiates between the behavioural effects of observing violence and reading or hearing about it.[40] Moreover, our own factor analysis of the four media variables (Table 4) indicates that in this sample of countries with a high level of media development, the various components are not highly interrelated. While it appears that television and radio variables are highly co-variant, newspaper circulation and cinema attendance are not related either to them or to each other. Therefore, there should be some reservations about constructing a composite variable called "media". The effect, then, of each of the media variables on conflict will be examined separately in the following analysis.

Table 4

Principal Components Analysis—Mass Media Variables: 19-Nation Sample

Variable	Factors[a]		
	I	II	III
Newspaper circulation per 1,000 population	.460	.127	.877
Radio receivers per 1,000 population	.884	.127	−.331
Television receivers per 1,000 population	.925	.143	−.137
Cinema attendance per 1,000 population	−.320	.946	−.053

[a]Block loading > .600

The Collective Conflict Equation

Table 5 shows the results of a multiple regression using collective conflict as the dependent variable and each of the media exposure measures as independent variables.[41] Economic development has also been included as an independent variable. This has been done to reduce the amount of specification error in this equation.[42]

Table 5

Regression of Media Variables on Collective Conflict (N = 19)

Independent Variable	Parameter Estimate	Standard Error	R^2	F Statistic
Economic development	.0001	.0004	.09	.02
Newspaper circulation per 1,000 population	−.0069	.0023	.27	9.28
Radio receivers per 1,000 population	−.0021	.0026	.01	.68
Television receivers per 1,000 population	−.0097	.0065	.09	2.25
Cinema attendance per 1,000 population	−.0257	.0550	.01	.22
Constant	3.903			

R^2 .50

Standard error of the estimate .97009

The results of this regression suggest that the volume of media exposure has little relationship to collective conflict. Employing normal significance criteria, that is, a parameter estimate at least two times its standard error and a significant F statistic, we find the impact of most of the media variables to be negligible. Only the estimated coefficient for newspaper circulation proved to be statistically significant. However, while this factor would appear to account for 29 per cent of the variation in levels of collective conflict for this sample as indicated by the r^2, the parameter estimate for the newspaper circulation variable has the wrong sign. This indicates that there is a negative relationship between newspaper circulation and collective conflict across this sample. These initial findings would thus argue strongly in the direction of rejecting the hypodermic hypothesis.

A similar series of results was generated by the regression of the media exposure variables on the individual forms of conflict behaviour. Tables 6 through 11 show the results of these equations. As with the collective conflict equation, the only variable to have a consistently significant, but negative, impact was newspaper circulation. In five of the six regressions (the anti-government demonstration equation being the exception) this variable proved significant. Over all, the level of newspaper circulation was determined to explain 15 per cent of the variance in the number of riots, 37 per cent of the variance in the number of deaths, 44 per cent of the variance in the number of armed attacks, 33 per cent of the variance in the number of pro-government demonstrations, and 25 per cent of the variance in the number of political strikes. In all instances, however, the estimated coefficient again indicates the existence of a negative relationship between newspaper circulation and collective conflict.

Table 6

Regression of Media Variables on Riots (N = 19)

Independent Variable	Parameter Estimate	Standard Error	R^2	F Statistic
Economic development	−.0002	.0007	.11	.08
Newspaper circulation per 1,000 population	−.0093	.0044	.15	4.46
Radio receivers per 1,000 population	−.0001	.0005	.00	.04
Television receivers per 1,000 population	.0180	.0125	.11	2.08
Cinema attendance per capita	−.0413	.1069	.01	.15
Constant	5.019			

R^2 .38

Standard error of the estimate 1.885

Table 7

Regression of Media Variables on Anti-Government Demonstrations (N = 19)

Independent Variable	Parameter Estimate	Standard Error	R^2	F Statistic
Economic development	.0002	.0008	.26	.04
Newspaper circulation per 1,000 population	−.0061	.0046	.04	1.74
Radio receivers per 1,000 population	−.0022	.0053	.00	.18
Television receivers per 1,000 population	.0174	.0132	.09	1.74
Cinema attendance per capita	−.0364	.1121	.00	.11
Constant	3.267			

R^2 .40

Standard error of the estimate 1.977

Table 8

Regression of Media Variables on Pro-Government Demonstrations (N = 19)

Independent Variable	Parameter Estimate	Standard Error	R^2	F Statistic
Economic development	.0002	.0005	.12	.20
Newspaper circulation per 1,000 population	−.0082	.0028	.33	8.43
Radio receivers per 1,000 population	.0013	.0032	.01	.16
Television receivers per 1,000 population	.0014	.0081	.00	.03
Cinema attendance per capita	−.0728	.0688	.04	1.11
Constant	3.662			

R^2	Standard error of estimate
.50	1.213

Table 9

Regression of Media Variables on Political Strikes (N = 19)

Independent Variable	Parameter Estimate	Standard Error	R^2	F Statistic
Economic development	−.0003	.0005	.00	.31
Newspaper circulation per 1,000 population	−.0069	.0030	.26	5.18
Radio receivers per 1,000 population	.0014	.0035	.01	.15
Television receivers per 1,000 population	.0068	.0087	.03	.61
Cinema attendance per capita	.0215	.0743	.00	.08
Constant	2.728			

R^2	Standard error of the estimate
.30	1.310

Table 10

Regression of Media Variables on Armed Attacks (N = 19)

Independent Variable	Parameter Estimate	Standard Error	R^2	F Statistic
Economic development	.0004	.0006	.14	.45
Newspaper circulation per 1,000 population	−.0155	.0038	.45	16.46
Radio receivers per 1,000 population	−.0025	.0044	.01	.32
Television receivers per 1,000 population	.0114	.0110	.03	1.08
Cinema attendance per capita	.0332	.0933	.00	.13
Constant	5.371			

R^2	Standard error of the estimate
.62	1.645

Table 11

Regression of Media Variables on Deaths (N = 19)

Independent Variables	Parameter Estimate	Standard Error	R^2	F Statistic
Economic development	.0001	.0007	.07	.03
Newspaper circulation per 1,000 population	−.0135	.0043	.38	9.89
Radio receivers per 1,000 population	.0009	.0049	.00	.03
Television receivers per 1,000 population	.0068	.0123	.02	.30
Cinema attendance per capita	−.0602	.1044	.01	.33
Constant	4.956			

R^2	Standard error of the estimate
.49	1.840

In light of these results, a series of supplemental regressions was run using collective conflict and each of its individual forms as dependent variables and newspaper circulation as the independent variable. The results of this analysis, as shown in Table 12, indicate again that in six of the seven regressions (the anti-government demonstration equation once more being the exception) the level of newspaper circulation had a significantly negative effect on the particular forms of collective conflict.[43]

The impact that newspaper circulation has been found to have on collective conflict is interesting. Generally, it can be assumed on the basis of this analysis that the greater the newspaper circulation the lower the level of collective conflict in a society. Figure 1 offers a graphic illustration of the relationship between newspaper circulation per 1,000 population and collective conflict for the 19 nations in this sample. As illustrated, the countries that have the highest level

Table 12

Regression of Newspaper Circulation on Conflict Variables (N=19)

Dependent Variable	Parameter Estimate	Standard Error	R^2	F Statistic
Collective conflict	−.0049	.0023	.20	4.37
Riots	−.0058	.0043	.10	1.79
Deaths	−.0110	.0041	.30	7.24
Armed attacks	−.0121	.0041	.33	8.50
Anti-government demonstrations	−.0019	.0048	.01	.15
Pro-government demonstrations	−.0066	.0029	.24	5.43
Political strikes	−.0059	.0026	.23	5.14

Figure 1

Relationship Between Collective, Conflict and Newspaper Circulation per 1,000 Population: 19-Nation Sample, 1955-1965
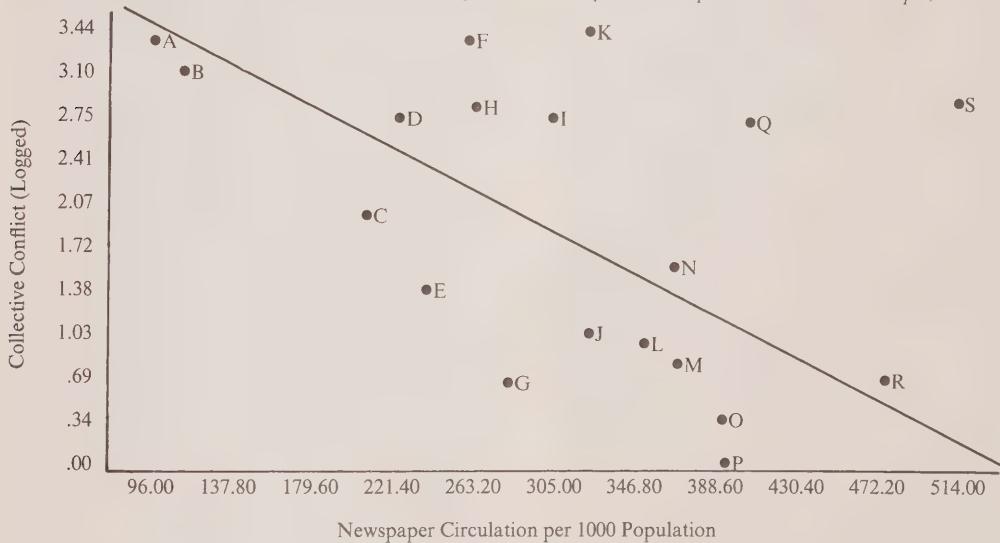
Correlation (R)	−.452
Standard error of the estimate	1.066
R^2	.20
Intercept (A)	3.38
Significance	.026
Slope	−.005

For a key to the interpretation of this figure, see note 44.

of newspaper circulation (generally) have the lowest levels of domestic conflict. This alone would seem to be an outright refutation of the hypodermic hypothesis. Furthermore, when this negative relationship is combined with the negligible relationships found for the other media variables we do not seem unduly hasty in rejecting this proposition altogether. Hence, at this rather abstract level of analysis, we can state that no relationship exists between media exposure and collective conflict.[45] This does not mean to suggest that no relationship between media and conflict could be discovered, but rather that none was determinable at the level of analysis used here. Hence, it would appear that a further investigation of this relationship requires a different methodological strategy, more specifically one which is less abstract than aggregate data analysis. The best alternative in this case would seem to be what is referred to as the country specific approach. By limiting our focus to one country, we can attempt a more intensive examination of some of the dynamics of the media-conflict relationship, as well as some of its subtleties which often defy precise measurement. For this reason the following section will examine the historical occurrence of collective conflict in Canada.

Collective Conflict in Canada

The myth of the "peaceable kingdom" has been one of the most durable themes in Canadian political culture.[46] The assumption that pervades this idea is that Canadians have traditionally been, and remain, a thoroughly non-violent people. It has been noted by one prominent historian that practically all Canadian textbooks in history, political science, and sociology presume that Canada has always been a tranquil and pacific society – one that evolved from colony to responsible government to independence by peaceful debate.[47] Or, as Joseph Howe characterized the advent of responsible government in Nova Scotia, "without the breaking of a pane of glass".[48] Implicit in the optimistic parochialism of this myth is the further suggestion that Canadian history has been relatively free of the violence and extremism that have characterized the growth and development of the United States. It is, thus, a general point of consensus that not only was Canadian Confederation bloodless in contrast to the revolutionary origin of the United States, but also that our history has been virtually free of the lawlessness and violence that characterized the American frontier experience. The Hollywood image of the rugged, individualistic gunman or the roving bands of night riders to which we are exposed by the American media is thought to have no parallel in Canadian history, where the West was secured by a law-enforcement agency – the Mounties. Moreover, it is also a fundamental supposition in the peaceable kingdom myth that Canada has experienced substantially less radical and criminal violence than has occurred in the United States. While the occurrence of a few comic-opera rebellions and some rather bothersome

strikes are acknowledged, citizens assume complacently that resorting to violence has been atypical of the Canadian experience.

Unfortunately, the uncritical acceptance of this thesis has caused misjudgments about the degree of abnormality represented by conflict behaviour in this country and posed obstacles to its understanding. Largely as a result, domestic conflict has been neglected for some time as a field worthy of serious research. The conscious and unconscious perpetuation of the peaceable kingdom myth also accounts, to a large extent, for the current tendency in private, political, and academic circles to react to contemporary expressions of conflict with a good deal of shock. It has also led to the acceptance of certain misplaced conclusions about the undercurrents present in our own society, as seen in the attempt of many politicians to attribute the "contretemps" of the sixties to the fall-out of American violence or to various imaginary conspiracies.

Although it is not incorrect to assume that social strife in this country has never reached the quantity or the intensity of American violence, such a comparison is both insidious and irrevelant. The fact that there has been appreciably less violence in Canada over the past two centuries than has occurred in the United States should not be construed to mean that civil conflict has been adventitious to the development of Canadian society. The fact is that there has been appreciably more violent conflict in the past than most of us are aware of. It has been less dramatic and less well publicized than in the United States, but it has none the less been an integral part of the Canadian political process.[49]

Even a selective review of some violent incidents in Canadian history seems to bear out this contention. First of all, while the lack of bloodshed over Confederation is something of a moot point, neither the pre- nor post-Confederation period was totally calm or serene. Until 1867, Canada gave the image of a relatively disorderly country in which overt conflict was frequent between whites and Indians, French and English, Canadians and Americans, different fur-trading interests, and rebels supporting Papineau and Mackenzie versus the Tory establishment.[50] Neither was the Canadian experience with manifest destiny as tranquil as it has usually been portrayed. Social disorder was generally characteristic of the Canadian frontier, due to the highly competitive nature of frontier economics which centred on the timber and fur trades.

There are two recurrent themes in the later history of Canadian collective conflict – religion and race. Sectarian violence was especially prominent in this country during the late nineteeth and early twentieth centuries. Violent encounters between Orangemen and the Irish reached such ritualistic dimensions that every March 17 and July 12 brought with it a call to arms.[51] The nineteenth century also witnessed a number of small-scale civil wars with serious racial overtones. Undoubtedly the pre-eminent among these was the Riel

Rebellion in the West.[52] There was also what has been called the Shiners War, involving the Irish and other ethnic groups, which raged in Ottawa (then Bytown) between 1837 and 1845.[53] While now something of a curio of Canadian history, this struggle for recognition and economic security epitomized the social disorder in Ontario during the period.

There have also been some very substantial outbreaks of election violence during the last hundred-odd years. Intimidation and "Teddy Boy" tactics were at one time an almost integral part of political campaigning in this country. Again, this was frequently due to the sectarian nature of the competing political parties. Whatever the reason, most election days were, as one prominent Orangeman characterized them, "days of blood and fire".[54] During the mid and late nineteenth century, campaign slogans such as "No Popery, No Surrender" or "Vote Conservative or your barns burn" were quite prevalent.[55] Often they had significantly more impact than more recent electioneering practices. While the present century has been quite tranquil in comparison, it too has witnessed some very violent elections. The federal election in 1911 over the reciprocity treaty occasioned numerous incidents of mob-rioting and street-fighting.[56] The federal election of 1935 was highlighted by a series of sectarian incidents which assumed, according to one historian, the dimensions of a small war.[57] More recently, a rather substantial riot broke out in Montreal on the eve of the 1968 federal election when militant separatists confronted Prime Minister Pierre Trudeau on the reviewing stand of the Saint-Jean Baptiste parade.

With the exception of the 1960s, which are examined below, most of the major violence of the present century, with certain notable exceptions (for example, election violence, the conscription riots in Quebec in 1918, the VE- and the VJ-day rioting, and various episodes of Doukhobor violence) has been labour-related.[58] Such conflict has been extensive and often quite bitter, as much of it involved the fundamental question of the right to unionize. Between 1910 and 1966, Canada had 227 strikes marked by explosions of violence.[59] Many of these incidents, moreover, had significant political implications and federal troops and the RCMP were frequently used to suppress them.[60]

While none of the incidents of Canadian economic violence was comparable to the Ludlow Massacre in Colorado in 1914 or the 1937 Memorial Day massacre during the Little Steel strike in Chicago, some of them were incredibly vicious. One of these incidents, the Winnipeg General Strike, has been called one of the most significant violent occurrences in Canadian history.[61] Others, such as the strikes at Murdochville and Asbestos, have also had significant societal repercussion. The history of labour violence in the twentieth century rings like a litany of the major industrial and railway centres in Canada. While many of these incidents are not as well known as those mentioned

above, they have nevertheless had a significant impact on the economic structure of our society and, to an extent, also on the political structure, due to the frequent interventions of various levels of government.

This cursory review of Canadian history should serve to implant some doubts about the unrealistic tranquility and rationality that is often attributed to our society. While it is not necessary to assume that violent conflict is endemic to Canadian society, there do seem to have been some significant antagonisms in the social fabric. Awareness of this fact may permit a better perspective from which to judge the degree of extra-normality of contemporary expressions of violence and their causes.

Contemporary Collective Conflict in Canada in a Comparative Perspective

During the 1960s disorder in Canada seemed part of a global epidemic. For some time the list seemed endless – Paris, London, Rome, Montreal, Chicago, Warsaw, Peking. No country appeared to escape unscathed. Civil conflict was so pervasive that one Canadian psychiatrist referred to the Sixties as the age of the psychopath.[62]

According to the data used in the preceding cross-national analysis, Canada experienced, during the period 1955 to 1965, 24 anti-government demonstrations, 19 riots, one political strike, ten pro-government demonstrations, 92 armed attacks, and eight conflict-related deaths. A time profile showing the occurrence of these incidents is provided in Figure 2. It indicates that almost 85 per cent of these incidents took place between the years 1962 and 1965.[63] In light of the previous discussion about the recurrence of racial conflict in this country, it should be noted that most of the incidents recorded here, specifically the armed attacks and the conflict-related deaths, may be attributed to two ethno-political groups – the Sons of Freedom Doukhobors sect and the *Front de libération du Québec*. The violence of the Sons of Freedom reached its apogee in 1962 and little has been heard from this group since.[64] From 1963 onward, most of the violence can be attributed to the FLQ and separatist unrest in Quebec. Moreover, four of the eight deaths resulting from domestic unrest can be attributed directly to this organization.

Figure 2

Time Profile of Canadian Collective Conflict, 1955-1965
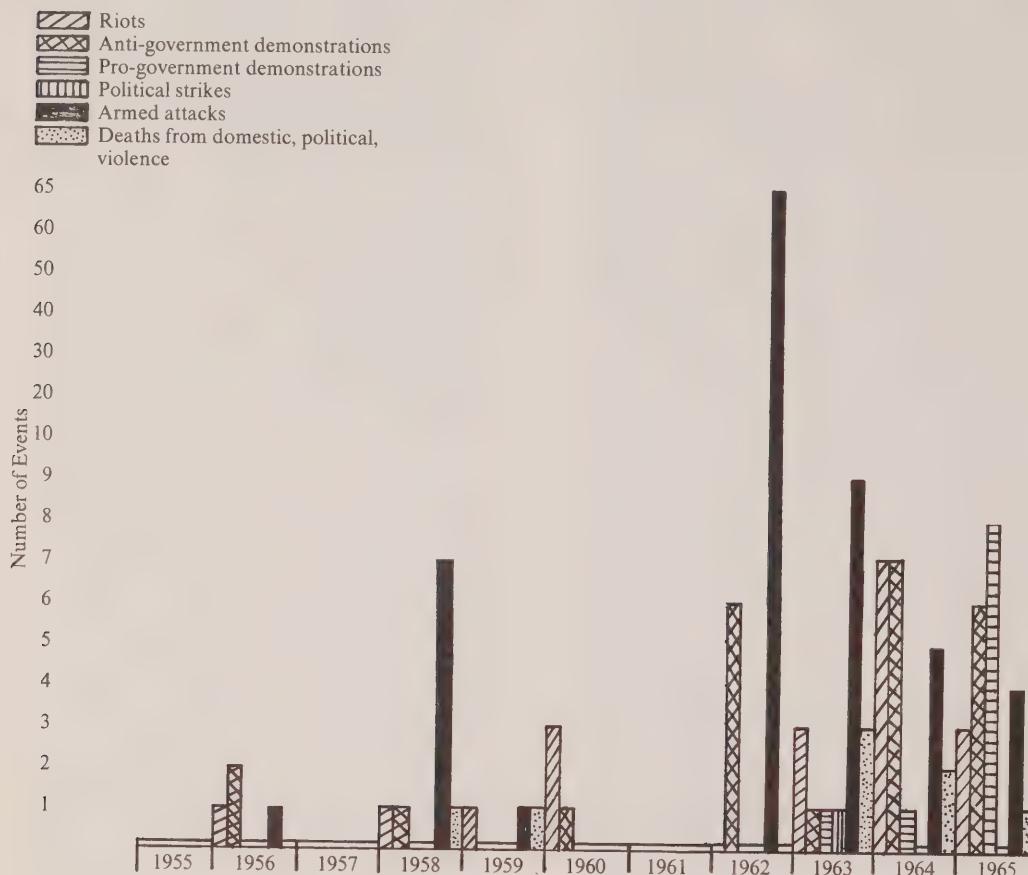
To a large extent, the Canadian experience with disorder over the last couple of decades has not been markedly dissimilar from that of many other countries. An analysis of various data sets using different conflict measures, different time frames, and different samples of nations all seem to indicate that although Canada had a relatively low level of intra-societal conflict, it was somewhere around the median for advanced industrialized nations.

Table 13

Incidence of Collective Conflict: 19-Nation Sample, 1955-1965

Nation	Collective Conflict Total**	Rate*	No. of Riots	Rate	No. of Anti-Govt. Demonstrations	Rate	No. of Pro-Govt. Demonstrations	Rate	No. of Political Strikes	Rate	No. of Armed Attacks	Rate	No. of Deaths	Rate
Venezuela	2230	247.8	157	17.4	34	3.8	25	2.8	15	1.7	448	49.8	1546	171.8
United States	2149	11.0	325	1.7	925	4.7	66	0.3	17	0.08	628	3.2	184	0.9
France	962	19.6	70	1.4	183	3.7	65	1.3	44	0.8	498	10.1	102	2.0
Italy	335	6.4	101	1.9	18	0.3	22	0.4	25	0.5	135	2.5	34	0.5
Japan	203	2.0	69	0.7	116	1.2	3	0.03	6	0.06	6	0.06	2	0.02
United Kingdom	177	3.2	60	1.0	94	1.7	3	0.05	2	0.03	115	2.1	3	0.05
Canada	154	7.7	19	1.0	24	1.2	10	0.5	1	0.05	92	4.6	8	0.4
West Germany	141	2.4	27	0.5	67	1.1	25	0.4	1	0.01	21	0.4	0	0
Belgium	114	12.7	40	4.4	40	4.4	7	0.8	9	1.0	12	1.3	6	0.7
Ireland	37	12.3	1	0.3	1	0.3	1	0.3	1	0.3	32	10.6	1	0.3
Austria	33	4.7	18	2.6	2	0.3	3	0.4	3	0.4	6	0.9	1	0.1
Denmark	16	3.2	0	0	15	3.0	0	0	0	0	1	0.2	0	0
Finland	15	3.0	4	0.8	1	0.2	6	1.2	0	0	1	0.2	3	0.6
Switzerland	10	1.7	3	0.5	0	0	1	0.2	1	0.2	5	0.8	0	0
Australia	9	0.8	1	0.09	2	0.2	0	0	0	0	6	0.5	0	0
Netherlands	7	0.6	1	0.08	2	0.2	3	0.3	0	0	1	0.08	0	0
Sweden	6	0.8	5	0.6	0	0	1	0.1	0	0	0	0	0	0
Norway	5	1.3	0	0	2	0.5	2	0.5	0	0	1	0.3	0	0
New Zealand	0	0	0	0	0	0	0	0	0	0	0	0	0	0

* All rates are for per million population (1965).
** For the purpose of comparison, the collective conflict total includes assassinations.

Viewed in terms of the 19 highly democratic and industrialized countries used in the preceding analysis, Canada ranked slightly above the median for such countries. As Table 13 indicates, Canada ranked seventh in the incidence and sixth in the rate of domestic conflict, although in both cases it was far removed from Venezuela, which was the most violence-prone country in the sample. In terms of the particular forms of conflict, Canada ranked ninth in the number and seventh in the rate of riots, eighth in the number and seventh in the rate of anti-government demonstrations, sixth in the number and fifth in the rate of pro-government demonstrations, and ninth in the number and eighth in the rate of political strikes. It was ranked fifth, however, in the number and fourth in the rate of armed attacks. Canada was also fifth in the number and seventh in the rate of deaths from domestic violence.

The particular character of this sample tends to exaggerate the relative prominence of conflict in this country as most of the countries in it have relatively low levels of conflict. Table 14 shows this sample integrated into a larger universe of 84 nations: of the 20 countries with the lowest levels of collective conflict, ten were also in the preceding sample. In this sample Canada ranks at position 49, again slightly above the median for nations with similar socio-economic characteristics but far removed from Indonesia and Hungary, both of which had bitter periods of major civil strife during the era.[65]

Table 14

Incidence of Collective Conflict: 84-Country Sample, 1955-1965

Indonesia	90621	Panama	209
Hungary	40200	Japan	203
Malaysia	10805	Afghanistan	199
Argentina	7325	United Kingdom	177
Cuba	5419	Ethiopia	159
China	5239	Turkey	156
India	5068	Canada	154
Dominican Republic	4799	Spain	153
Iraq	4543	West Germany	141
Colombia	4512	Chile	140
Taiwan	3382	Portugal	115
Laos	2808	Belgium	114
Pakistan	2578	Israel	108
Tunisia	2577	East Germany	97
Morocco	2276	Greece	93
Sudan	2262	Ghana	88
Venezuela	2230	Costa Rica	79
United States	2149	Egypt	75
Cyprus	1898	Thailand	64
Syria	1569	Libya	48
South Africa	1175	Rumania	44
Bolivia	1141	Czechoslovakia	41
Burma	1007	Ireland	37
France	962	Uruguay	36
Lebanon	844	Austria	33
Albania	785	Cambodia	32
Peru	766	Korea	26
Poland	727	El Salvador	18
USSR	538	Denmark	16
Iran	497	Finland	15
Mexico	462	Bulgaria	13
Haiti	458	Switzerland	10
Philippines	442	Australia	9
Sri Lanka	440	Netherlands	7
Nicaragua	375	Sweden	6
Italy	335	Norway	5
Paraguay	264	Yugoslavia	4
Ecuador	256	Liberia	3
Guatemala	252	Iceland	2
Jordan	234	Luxembourg	0
Honduras	211	New Zealand	0
Brazil	210	Saudi Arabia	0

Some of the other large cross-national analyses using different measures have placed Canada slightly further down the list. In Ted Gurr's survey of civil unrest in 114 nations and colonies from 1961 to 1965 Canada ranked eightieth.[66] In a more recent study using measures of both physical and structural violence, Gurr and Bishop ranked Canada sixty-eighth out of 86 countries.[67] Nevertheless, in both cases it was still around the median of the developed sub-sample.

A rather ingenious attempt to construct instability profiles of various nations has also been undertaken by the Feierabend group at the University of San Diego. This group attempted to distinguish political instability events in terms of the intensity of aggressive behaviour utilizing a seven-point scale of political events ranging from zero (denoting extreme stability) to six (denoting extreme instability). For example, a general election was an event associated with the lowest position. Resignation of a cabinet official had a weight of one, peaceful demonstrations a weight of two, and the assassination

of a significant political figure but not a head of state had a weight of three. Mass arrests or the assassination of a chief of state occupied position four. A *coup d'état* was assigned position five, and a civil war was given a weight of six, the highest rating for political instability.[68]

On the basis of this scale 84 countries were assigned to six groups, depending on the most unstable event each had experienced. Hence, a nation that had experienced a civil war was given a group score of six, another that had experienced a *coup d'état* would be placed in position five, and a third with mass arrests would be assigned to group four. Subsequent to the placement of each country in a particular group, the sum total of each nation's stability rating was calculated. To avoid distortion of the data, the stability profiles were calculated independently for three six-year periods of time (1948 to 1953, 1954 to 1959, 1960 to 1965) and the ranking within the group was then calculated by averaging the highest strife event in each of the six-year periods.

Table 15

Political Instability Profiles for 84 Nations, 1948-1965

1 (Stability)	2	3	4	5	6 (Instability)
			France 13435		
			South Africa 13422		
			Brazil 13209		
			Morocco 13194		
			Portugal 13190		
			Turkey 13189		
			Poland 13179		
			Thailand 13152		
			Jordan 13145		
			Cyprus 13123		
			Hungary 13113		
			Philippines 13105	Argentina 16445	
			Czechoslovakia 13100	Bolivia 16318	
			China 13086	Cuba 16283	
			Cambodia 13071	Iraq 16274	
			India 123360	Colombia 16244	
			Iran 12237	Burma 16213	
		Belgium 10162	Pakistan 12231	Venezuela 15429	
		Chile 10156	Sudan 12189	Syria 15329	
	United Kingdom 07112	Mexico 10111	U.S.S.R. 12165	Korea 15291	
	Ghana 07106	Uruguay 10100	Ecuador 12117	Haiti 15205	
	Austria 07057	Israel 10064	Nicaragua 12096	Peru 15196	
	Denmark 07030	Liberia 10036	United States 11318	Greece 14236	
	Iceland 07026	Ethiopia 10034	Spain 11284	Guatemala 14234	
	West Germany 06087	Italy 09192	Dominican Republic 11195	Lebanon 14212	
	Finland 06056	Libya 09069		Egypt 14152	
	Taiwan 06039	Rumania 09060	Ceylon 11152	Paraguay 14141	
	Australia 06026	Costa Rica 09058	Japan 11123	East Germany 14138	
	Sweden 06020	Afghanistan 09029	Malaya 11108	Laos 14129	
	Ireland 05031	Canada 08084	Yugoslavia 11077	Tunisia 14126	
Netherlands 04021	Saudi Arabia 05018	Switzerland 08042	Bulgaria 11071	Honduras 14105	
Luxembourg 03012	New Zealand 05015	Norway 08034	Albania 11067	Panama 14101	
				El Salvador 14079	Indonesia 18416

Feierabend's stability profiles for each nation are shown in Table 15. All nations within a group have the same average of highest strife events. The ranking within the group was contingent on the sum of the stability ratings for the three periods analyzed. The first two digits in the five-digit scale are the sum of the highest strife events occurring in each six-year period. The final three digits show the summed scores for all (weighted) political events for the 18-year period.

Canada is found at scale position three and at rank 18. Overall, 20 per cent of the 84 nations in this survey experienced less strife than Canada during the period 1948-65 while almost 79 per cent experienced more. Once again, the Canadian rating was only slightly higher than the median for advanced industrialized countries, which was somewhere in the upper third of group two.[69]

Table 16

Political Instability Profiles for 84 Nations, Summed Scores of Weighted Events, 1948-1965

Nation	Score	Nation	Score
Luxembourg	12	Japan	123
New Zealand	15	Tunisia	126
Saudi Arabia	18	Laos	129
Sweden	20	East Germany	138
Netherlands	21	Paraguay	141
Iceland	26	Jordan	145
Australia	26	Ceylon	152
Afghanistan	29	Thailand	152
Denmark	30	Egypt	153
Ireland	31	Chile	156
Ethiopia	34	Belgium	162
Norway	34	USSR	165
Liberia	36	Poland	179
Taiwan	39	Sudan	189
Switzerland	42	Turkey	189
Finland	56	Portugal	190
Austria	57	Italy	191
Costa Rica	58	Morocco	194
Rumania	60	Dominican Republic	195
Israel	64	Peru	196
Albania	67	Haiti	205
Libya	69	Brazil	208
Bulgaria	71	Lebanon	212
Cambodia	71	Burma	213
Yugoslavia	77	Pakistan	231
El Salvador	79	Guatemala	234
Canada	83	Greece	236
China	86	Iran	237
West Germany	87	Colombia	244
Nicaragua	96	Iraq	274
Czechoslovakia	100	Cuba	281
Uruguay	100	Spain	284
Panama	101	Korea	291
Honduras	105	United States	319
Philippines	105	Bolivia	323
Ghana	106	Syria	329
Malaya	108	India	360
Mexico	111	Indonesia	416
Hungary	113	South Africa	427
United Kingdom	116	Venezuela	429
Ecuador	117	France	435
Cyprus	123	Argentina	445

Source: James F. Kirkham, Sheldon G. Levy, and William J. Crotty, *Assassination and Political Violence* (New York: Praeger, 1970), p. 170.

While offering a valid perspective, the assignment of a special weight to the highest strife event experienced by a nation has a tendency to favour nations that have experienced many political strife events but none at the most extreme level. An alternative to this approach suggested by Kirkham, Levy, and Crotty involves the summing of the scores for all instability events for the 18-year period. Table 16 shows the rankings of the 84 nations on the basis of the summed scores. Most of the nations remain more or less in the same rank order, but some changes are notable. One of these is that the advanced industrialized democracies have less of a tendency to be concentrated in the first quarter of the summed scores, suggesting that many of these countries experienced extensive turmoil but little extreme violence. Canada's position was also adjusted by this summed ranking. It moved from eighteenth on grouped scores to twenty-seventh on summed scores. Utilizing this procedure 31 per cent of the nations in this survey experienced less civil strife than Canada between 1948-65, while 68 per cent experienced more. Canada's ranking still remained, however, above the median for advanced industrialized countries.

Unfortunately, the majority of cross-national data sets do not provide conflict data beyond 1967 and it is impossible to obtain a comparative perspective for the events of the last ten years. This is all the more unfortunate due to the fact that these were some of the most violent years in decades. This was especially true of Canada. Although no country-wide statistics exist on the extent or pervasiveness of civil unrest in Canada during the late Sixties and early Seventies, some idea of this can be obtained from a number of disparate sources. A recent study of collective violence in Ontario and Quebec between 1968 and 1973 has identified 160 such incidents of collective violence in these two provinces.[70] The year 1968 also witnessed the fourth wave of FLQ terrorism. Between 1968 and 1970 there were approximately 57 incidents of separatist terrorism.[71]

Although there were a few events in Ottawa, the majority were in Quebec. The foremost of these incidents of terrorism were the October 1970 kidnappings of British Consul James Cross and Quebec Labour Minister Pierre Laporte, and the subsequent assassination of Laporte. These acts resulted in the first peacetime invocation of the War Measures Act. They also proved to be the FLQ's swan song. There were numerous other manifestations of civil conflict during this period. According to Montreal police reports, that city experienced almost 400 non-violent demonstrations between the years 1969 and 1973.[72] It might also be noted that the RCMP's Bomb Data Centre recorded 65 bombings and attempted bombings for Quebec (11) and Ontario (54) for the year 1973. In 1974, there were 26 incidents recorded for each province. Unfortunately, these incidents have not been differentiated according to motive, so that it is not known how many were for political reasons.

Most of the Canadian turbulence of the 1960s was centred in Canada's two core provinces, Ontario and Quebec. A contemporary study of collective violence in these two provinces identified 246 cases between the years 1963 and 1973.[73] The incidence of this phenomenon, moreover, was found to be relatively similar in the two provinces, with Ontario having 125 incidents and Quebec 121. In addition to collective violence, there were also 104 terrorist actions not covered by that study during this same period.[74] With the exception of two incidents in Ottawa, the latter study found that terrorism was exclusively a Quebec phenomenon.

Although the two provinces had a very similar incidence of collective violence, the substantive aspects of the conflict (that is, the form, intensity, and content) were markedly dissimilar. Collective violence in Quebec was more frequently related to demonstrations (59 per cent) than it was to strikes (33 per cent). In Ontario on the other hand, 41 per cent of the violence was demonstration-related and 40 per cent was strike-related.[75] The relatively higher incidence of demonstration-related violence and the lower incidence of strike-related violence in Quebec as compared to Ontario can be interpreted as one indication that the grievances occasioning violence were much more politicized and pervasive in Quebec.

Table 17

Comparison of Conflict Intensity[78]*, Ontario and Quebec, 1963-1973

Intensity Indicator	Ontario	Quebec
Incidents with a duration of more than one-half day	10.6% (13)	10.0% (12)
Incidents involving more than 160 police and security forces	5.6% (4) ·	19.8% (30)
Incidents involving more than 1600 insurgents	10% (17)	19.2% (24)
Incidents involving more than ten arrests	33.2% (31)	48.6% (33)
Incidents involving more than 20 insurgent casualties	0	20.7% (6)
Incidents involving more than ten police casualties	0	22.7% (5)
Incidents involving more than $50,000 in material damage	0.8% (1)	22.11% (10)
Incidents involving more than 100 total casualties (police and insurgents)	0	9.6% (4)

* The above are all adjusted frequencies.

There was also a clearly discernible difference in the intensity of collective violence in the two provinces. Table 17 shows the eight indicators used in the measurement of this factor. Although the duration of violence was similar in both provinces, collective violence in Quebec involved more police, more insurgents, more arrests, more casualties, and more damage.

The differences in both pervasiveness and intensity of the conflict between the two provinces can be attributed to one principal factor – the motivation or content of the protest.[76] The difference in the issues that occasioned violence in Ontario and Quebec was quite remarkable. Much of the violence in Ontario was directed at extra-societal concerns or elements. In this province, 23 per cent of the incidents of demonstration violence were related to foreign political issues, whereas only 12.8 per cent were related to domestic or Canadian concerns.[77] Moreover, labour violence in Ontario was exclusively picket-line-oriented and directed at very narrow union considerations such as wages and contracts. Clearly, then, collective violence in Ontario was of peripheral relevance to the province at large. Moreover, the salience of foreign political issues in this province may be attributed to cultural and especially media penetration by the United States as many of the issues had a discernibly close relationship to the government of the United States.

In Quebec, on the other hand, the content of collective violence was quite different. Both demonstration and labour violence in that province were frequently related to issues concerning the population as a whole. Forty per cent of the incidents of collective violence were related to domestic concerns whereas only six per cent were related to foreign issues.[79] Moreover, in most cases domestic concerns in Quebec were generally provincial considerations and, more specifically, issues surrounding the nationalist movement. Between the years 1968 and 1973 when this movement was very active, 87 per cent of the violence over domestic issues was related to the nationalist question.[80] Typical of such violence were the numerous riots surrounding the introduction of Bill 63 protecting the language rights of Quebec's Anglophone minority, the attempted occupation of McGill University by nationalists in 1969, and the several violent Saint-Jean Baptiste and Victoria days.

In further contrast to Ontario, much of the strike violence in Quebec also had implications beyond the labour front. The political focus of Quebec's labour unions has frequently been attributed to the "colonial character" of Quebec's economy: that is, its domination by English-Canadian and American interests. Even contract negotiations frequently became politicized, as they did, for example, in the 7-Up strike of 1968.[81] Furthermore, as radical separatism died out in the early 1970s, labour moved into the forefront of the nationalist movement and became the major political opposition in the province.

The differences in the character of collective violence in Ontario and Quebec are quite striking indications that, in terms of focus and instrumentality, conflict was a completely different phenomenon in the two provinces. In Quebec, collective violence was a part of the nature of politics: it was ideologically based and functionally relevant. In Ontario, most of the violence was either irrelevant to the larger society or relevant to only a very small segment of it.

Conclusion

In brief, this chapter has concluded on two general topics. First, no discernible relationship was found between media exposure (newspaper circulation, radio receivers, television receivers, and cinema attendance) and collective conflict and violence across 19 nations. Since this cross-national analysis provided no indication of a causal relation between these two phenomena, it can be safely argued that the hypodermic thesis is probably invalid. The invalidation of this thesis led to the adoption of a less abstract analytical perspective in the second half of the chapter. In the country-specific study, Canada proved to have a history of erratic collective conflict and violence. While Canada was found to have low total violence when comparison was made on a world-wide basis, it still placed near the median among advanced industrialized states. The form and target of this violence differed greatly from Ontario to Quebec, but the two provinces experienced approximately the same level of violence for the period examined.

Collective conflict and violence of various types and foci in Ontario, Quebec, and Canada continue to be an essential ingredient in our historical evolution. Knowledge of the level of this violence in Canada may not be widespread, but the media do provide considerable coverage of it. How much attention, with what intensity, and with what effect is it communicated? These are the subjects of the next two chapters.

Chapter Three

Violence and the Print Medium in Ontario

The study of collective conflict and violence within the Canadian context has received at best a haphazard treatment. The literature abounds with historical accounts of particular rebellions or strikes, with their own pantheon of heroes and villains. For the most part, these episodes of Canadian history are viewed as a unique phenomenon and more as objects of curiosity than of serious academic scrutiny. No apparent attempt has been made to fully understand their etiology or to fit them within the perspective of the forces that have shaped Canadian society. Bearing in mind this substantial gap in the general Canadian literature as shown in Chapter II, we have undertaken a research project related to Canada's most populous province, Ontario.

One of the most useful methodological techniques in collective conflict and violence research is content analysis. Defined as the quantitative measurement of human communication, content analysis has broad applicability in the social sciences and humanities.[1] The sort of subconscious judgments that one naturally makes while evaluating books, newspapers, and other forms of communication are carefully recorded and analyzed to reveal trends and orientations. The two most widely utilized varieties of content analysis are events data and evaluative assertion analysis. While a simplified version of the latter was employed in the preparation of the case studies to be discussed in Chapter IV, the principal investigative technique used here is events data or events statistics.

The most convenient source of record for this purpose is the daily newspaper.[2] More than any other instrument, the newspaper systematically records a large volume of data in a readily retrievable fashion. Each edition provides a glimpse of the vast interaction of human society, as seen through the eyes of reporters and editors. The use of newspapers in research is not without significant drawbacks, however. There may be a specific metropolitan orientation or ideological bias that serves to exclude certain types of news reports. On any given day, a number of idiosyncratic factors may influence the particular set of articles to be included in that edition. And, of course, the sheer volume of

newsprint that is generated every year presents the researcher with a formidable obstacle.

None the less, after considering all other sources of basic information about violence in Ontario, the daily newspaper was judged to be the most appropriate for our study. A number of important factors influenced the choice of the particular newspaper for scrutiny, as well as the time frame to be reviewed. Given the extremely laborious nature of content analysis and the limited time and resources at our disposal, it was decided to focus on one newspaper, *The Globe and Mail*. It was chosen for several reasons, the most important of which were its reputation as a quality newspaper and its broad orientation. Professor John Merrill of the University of Missouri's School of Journalism, in an influential book entitled *The Elite Press*, included *The Globe and Mail* among the thirty top élite press newspapers of the world.[3] While in sheer circulation figures it is dwarfed by newspapers such as *The Toronto Star*, it is, as John Porter suggested, "the only Canadian daily with any claims to being a national newspaper".[4] Referred to as Canada's "paper of record", it is more likely than other newspapers to include news reports from outside of Toronto, and it thus provides a rich source of data on general Ontario events.[5] Its regular format and the paper's general reputation for cautious and thorough journalism were also factors favouring the selection of *The Globe and Mail*.

The choice of time span was also made after serious consideration of the alternatives. The period from January 1, 1965, to December 31, 1975, was judged to be substantial enough to mediate any short-term deviations but not so long as to be unmanageable. Starting in the turbulent era of the 1960s, the time frame extends to the last complete year for which microfilm is available.

The content analysis of the eleven calendar years of *The Globe and Mail* involved the scanning by researchers of approximately 150,000 pages of newsprint.[6] Unlike *The New York Times*, *The Globe and Mail* does not have an index, thus necessitating the laborious task of reviewing each day's edition. This research technique provided a substantial body of original, usable data which could be prepared for

computer analysis. There were two principal objectives in scanning *The Globe and Mail* for the period. The first objective was to identify the universe of acts of collective violence and individual political violence in Ontario. The second was to evaluate the character of the media coverage accorded those acts. As a result, two separate coding sheets were developed and filled out for every identifiable incident. As a form of cross-check on this scanning process, a third coding sheet was developed to evaluate a random sample of front pages. The purpose of the random sample was to provide a broad overview of the period by estimating the degree of attention given to stories of violence on the prime news page. While the definitional criterion was less rigorous than that employed in the main portion of the content analysis which follows directly after this part, the random sample provided some valuable insights. Each article appearing on the front page was evaluated as to its theme and volume. Those articles dealing with a generalized conception of violence were also examined as to location on the page.

As in all such research, the slotting of each article into a limited number of categories required some arbitrary decisions by the coders.[7] Before beginning the task, a sample of articles was utilized to test and refine the category scheme. A subsequent test of inter-coder reliability based on six editions of *The Globe and Mail* produced agreement on 71 of 77 articles, thus a correlation coefficient of .92. From *The Globe and Mail* for the period, a sample of 209 was drawn employing a table of random numbers. According to Jones, a sample of this size carried only a 2 per cent risk of not being accurate within 8 per cent.[8] The random sample of front pages yielded the results found in Table 18. Of the 2159 articles that appeared on the front pages, 138 or 6.38 per cent dealt with political violence. Of the 377 photographs included on the front page during the period, 32 or 8.48 per cent were related to stories of political violence. There was an average of 10.33 front-page articles per issue.

When the category "other", which includes "The Morning Smile", "Index", and other special announcements, is subtracted from total articles, the actual proportion devoted to political violence increases to 7.94 per cent. If the category "other" is correspondingly subtracted from total photos, the proportion devoted to violence increases to 8.67 per cent. The number of articles devoted to political violence exceeds that of the categories of defence news, popular amusement, and education and arts. The number of articles depicting political violence ranks only slightly behind the categories of accident and disaster and crime news.

The nearly 2300 articles and photographs that were slotted into the category scheme were also carefully evaluated as to volume in square inches.

In terms of volume, articles depicting political violence accounted for 7.65 per cent of the total volume of front pages for the period. The total volume of

Table 18

Theme Frequency of Front-Page Articles (random sample)

Political Violence	Articles		Photographs	
	No.	Per cent	No.	Per cent
Ontario	10	0.46	8	2.12
Canada (except Ontario)	16	0.74	2	0.53
International (except Canada)	112	5.18	22	5.83
Sub-total	138	6.38	32	8.48
War and defence	135	6.25	14	3.71
Crime	151	6.99	21	5.57
Accident and disaster	145	6.71	32	8.48
Popular amusement	23	1.06	40	10.61
Human interest	260	12.04	129	34.21
Economic activity	368	17.04	24	6.36
Politics and government	489	22.64	75	19.89
Education and arts	29	1.34	2	0.53
Other	421	19.49	8	2.12

articles relating to violence exceeded that of the categories of war and defence, crime, accident and disaster, popular amusement, and education and arts. When the volume for the category "other" is subtracted from the total, the proportion devoted to violence increases to 8.10 per cent. Of the articles on violence in Ontario, the average volume per item was 73.3 square inches, which far surpassed the average coverage devoted to Canadian and international violence stories. Perhaps not surprisingly, stories of violence closer to home were accorded substantially more coverage and detail.

In terms of placement on the front page, articles describing Ontario, Canadian, and international violence were also noted as to quadrant. The top half of *The Globe and Mail* was used proportionately more for Ontario violence than for other Canadian violence. While there was considerable reportage of international violence, it was given even less prominence by being placed more often below the fold than above.

From the results of the random-sample inquiry, it is evident that stories of political violence form approximately eight per cent of the front-page volume of *The Globe and Mail*. While this percentage is not excessive, when added to the categories of war and defence and crime, both of which also involve a degree of violence, the total percentage is approximately 20.2. It is evident that, from the point of view of any regular newspaper reader, violence is a persistent feature of the front page of *The Globe and Mail*.[9]

Table 19

Volume Analysis of Front-Page Articles*
(random sample)

Political Violence	No.	Per cent	Average coverage per item
Ontario	733	1.12	73.3
Canada (except Ontario)	698	1.06	43.6
International (except Canada)	3350	5.43	32.2
Sub-total		7.61	
War and defence	4127	6.31	
Crime	4141	6.33	
Accident and disaster	4442	6.79	
Popular amusement	2804	4.28	
Human interest	12931	19.78	
Economic activity	10526	16.10	
Politics and government	16712	25.56	
Education and arts	791	1.21	
Other	3916	5.99	
Total	65371		

Measurement error = 0.24

* All figures are in square inches.

Table 20

Placement on Front Page of International, Canadian, and Ontario Violence Articles by Quadrant
(random sample)

Ontario
(10)

5	3
2	0

Canada (except Ontario)
(16)

5	4
5	2

International (except Canada)
(112)

20	30
38	24

The main body of the content analysis of *The Globe and Mail* was more extensive in scope and more definitive in terms of results. The development of the two principal coding sheets necessitated a number of difficult conceptual decisions. Collective conflict events were dropped from the analysis and only violent events were studied. Unfortunately, there exists no single all-encompassing operational definition of violence. Incidents of violence were judged to have occurred when there had been a clear-cut use of physical force against persons or property. For this reason peaceful strikes or demonstrations against particular policies or issues were now excluded from the lists of incidents. Another range of activity not included in our analysis was the whole area of criminal behaviour: reports of murders or robberies, however sensational, were not judged to be germane to our study. The incidence of violence in sports or in prison-related events was also excluded, as it was judged that they had occurred in an environmental context not comparable with that of general society. In evaluating the thousands of articles which appeared in *The Globe and Mail* over the period, the focus was on two broad categories of events: collective violence and individual political violence.

Under the rubric of "individual political violence" are subsumed those acts of violence by lone individuals or small groups against political targets or in the furtherance of a clearly evident political cause. Our review of *The Globe and Mail* identified nine such acts during the period. Of these, seven were bombings or attempted bombings of government property or foreign embassies. The two cases of attempted bombings were included due to the clear destructive intention of the prepetrators, and the substantial press coverage that ensued. Besides the bombing cases, the press reported one instance of aircraft hijacking in Ontario during the period. Hijacked aircraft landing at Ontario airports for the purposes of refueling only were not included in the listing. The assault on Premier Alexei Kosygin of the USSR on Parliament Hill in 1971 was the only notable threat against a major political personality in Ontario during the period.

The exceedingly small number of such cases renders the use of most statistical techniques inappropriate. There are, however, a few general observations that can be made about the extent of newspaper coverage accorded these acts. All nine incidents were reported

within the prime news section (first five pages) of their respective editions of *The Globe and Mail*.[10] Seven were reported on the first page of the initial reporting day and eight had subsequent follow-up coverage. (See Appendix A for the complete list.) The average volume of a first report of an act of individual political violence was 97 square inches. The range was from eight to 249 square inches. The average extent of photo coverage per report was 45 square inches.

The central focus of the content analysis of *The Globe and Mail* was on acts of what is referred to as "collective violence". The term requires elaboration. For operational purposes, violence was defined in terms of injuries and property damage. While there has been an effort recently in some literature to extend the definition to include psychological injuries or obstacles in the path of human fulfilment, there is virtually no way in which precise measurement can be introduced on this topic.

The choice of 50 participants as the criterion for "collective" is also a matter of some controversy. It should be noted, however, that all rigorous empirically based studies of collective violence have utilized a more or less arbitrary cut-off figure, usually 100 or more.[11] The obvious purpose of such a cut-off point is to exclude from the data set acts of simple criminality or juvenile delinquency. Although the individual acts of violence had to fulfil the criterion of being explicitly political to warrant inclusion in the analysis, we recognized five general types of issues motivating collective violence: economic, domestic political, foreign political, university-related, and issueless. The five general categories of issues that formed the basis of incidents of collective violence were defined in the following manner.[12] Economic issues included questions related to living and working conditions, such as inflation and union contracts. Domestic political issues arose from problems and policies related specifically to Canadian

government or society. Controversies related to all three levels of the federal system were included, as well as disputes arising from the Canadian social fabric. Foreign political issues were those arising from the actions of a foreign government or in response to problems related to a foreign society. Protests over the war in Vietnam accounted for many of the incidents in the foreign political category. University-related incidents were those arising from administrative policies or from disputes specific to a university community. Issueless or random incidents included such activities as group vandalism, brawls, or motorcycle-gang rampages.

A careful review of *The Globe and Mail* identified 129 incidents of collective violence in Ontario from 1965 to 1975.[13] While this data set is limited, it does provide some important preliminary findings on a topic that has not up to now received adequate treatment in Canada, and it allows for an examination of the extent and variety of newspaper coverage of those events.

From the list of 129 incidents of collective violence, it is possible to make some general geographical observations. Twenty-seven communities in Ontario, varying in size from Toronto to Seaforth, experienced some form of collective violence during the period of 1965 to 1975. Seventy-four incidents, or 57 per cent of all acts of collective violence occurred in the Metropolitan Toronto area. Nine incidents, or 7 per cent, took place in Ottawa. The remaining 46 incidents were randomly distributed throughout the province.

Based on the standard interval measurement scale for duration, 93 per cent of all incidents of collective violence lasted less than one-half day.[14] Most newspaper accounts gave no clear indication of whether a confrontation took place over a few seconds or several hours, thus necessitating an interval scale. The total duration (that is, the sum of the duration of all conflict events) of collective violence during this period was 77

Figure 3

Collective Violence in Ontario, 1965-1975
(graph of incidents per year)
(N = 129)
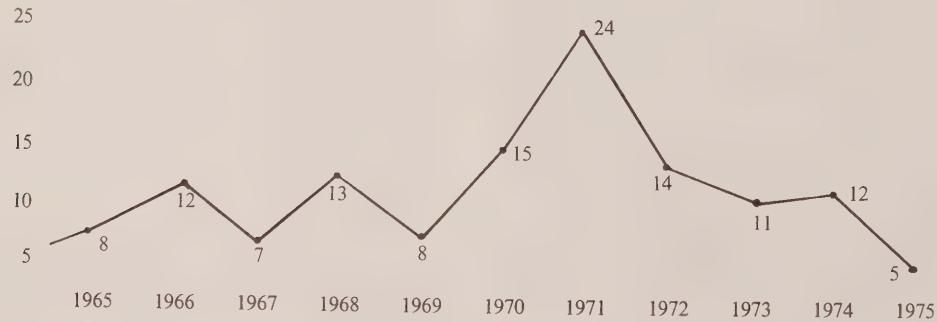
days. Figure 3 plots the number of incidents on a year-by-year basis. The largest number of incidents took place in 1971, due to a series of bitter labour disputes that year. Taking 12 incidents per year as an average, and excluding the unusual case of 1971, the graph for the period shows only minor fluctuations.

Incidents of collective violence in Ontario took three general forms. Forty-five per cent of the events were related to demonstrations, while 36 per cent were strike-associated and 19 per cent were the result of random incidents (for example, brawls). Demonstrations often attract a large number of participants with a wide spectrum of views. Demonstrations were defined as a public display of opposition to any one of a variety of general political issues or policies. As a form of violence, strikes were defined as a range of activity related to the stoppage of work or the withholding of an employee's services. Strike-related violence proved to be the most homogeneous in terms of the precipitating incidents. Eighty-five per cent of strike-related collective violence occurred as a result of scabs or non-striking workers attempting to cross picket-lines. Thirty per cent of all violence in Ontario was occasioned by such activity. The issueless or the catch-all category of "random incidents" was defined as those related to ad hoc confrontations or as the result of generalized frustration. Random incidents attracted a relatively large average participation and a substantial over-all total.

Table 21

Number of Participants According to Form of Violence[15]

	Total	Average Per Incident
Demonstration	73,800*	1300
Strike	30,100	700
Random	20,700	800

* All figures are rounded to the nearest 100.

Table 21 indicates the number of participants by the form of violence. The two volatile issues of civil rights and the Vietnam war seemed to account for much of the foreign political violence during the period. The greater salience of foreign over domestic political issues in providing the impetus for violence in Ontario is an interesting finding. It is in sharp contrast with the situation in Quebec, where, as shown in Chapter II, violence resulted primarily from Quebec-related problems. The apparent reason for the imbalance in Ontario is the extensive American media penetration of the province. The average Ontario news producer must assume that his/her readers are more attuned to American political issues than they are to those of

his/her own province.[16] Figure 4 plots the incidence of collective violence on a year-by-year basis according to the three principal motivating issues. In this graph, 1971 clearly stands out as the highwater mark of labour unrest. The profile of domestic political violence is remarkably stable for the period. The peak of foreign political violence in 1970 is probably due to the extensive number of anti-Vietnam war demonstrations of that year, revolving around the Cambodian invasion and the killings at Kent State University.

According to our calculations of the estimates contained in *The Globe and Mail*, approximately 132,000 people were involved in collective violence during the 11-year period. This, however, must be taken as a very rough estimate, as in most cases it was impossible to determine the actual number of people directly involved in the violence because only very general crowd estimates were reported. Based on the above figure, an intensity measure of 69,000 man days or 189 man years can be derived for this period.[17]

During the 11 years, some 6000 police and security forces were reported to have been mobilized for, or participated in, incidents of collective violence. It should be noted however, that 38 per cent of all press reports contained no estimate of the number of coercive forces involved or on stand-by.

The estimated property damage from all incidents of collective violence was reported to be only $109,000. Unfortunately, most of the newspaper accounts did not include a dollar figure for property damage, and there exists no satisfactory procedure for obtaining such estimates. Some 170 casualties were reported for the period, but there were no directly related fatalities. Approximately 1100 arrests were made for various offences related to incidents of collective violence.

Of the 129 incidents of collective violence, 57 per cent were directed at human targets, 16 per cent at property targets, and 26 per cent involved both. Police and security forces were the most frequent single target of collective violence in the province. Thirty-two per cent of all incidents involved security forces as targets. Property does have a special status in Western society, but attacks on human targets are generally considered to connote greater intensity.

In terms of the general cause or issue that gave impetus to the violence, five categories were identified. Forty-one per cent of all collective violence during the period was related to economic issues. Twenty-one per cent was associated with foreign-political issues (for example, Vietnam) and 16 per cent arose from domestic political issues. In addition, seven per cent of the incidents were judged to be issueless.

Table 22 indicates the number of participants involved in the five major issue-types of collective violence.[18] Incidents motivated by foreign political issues attracted by far the largest number of participants per event and as an over-all total. While the average number participating in incidents motivated by economic issues was relatively low, the over-all total

Figure 4

Time Profile of the Three Leading Issues Motivating Collective Violence in Ontario, 1965-1975 (N = 97)

Number of Events

Table 22

Number of Participants by Issue

	Total	Average Per Incident
Economic issues	35,200	700
Domestic political issues	22,700	1,100
Foreign political issues	44,500	1,600
Issueless incidents	9,800	500
University-related issues	400	100

was substantial, indicating a large number of such events. From the data, it was found that demonstrations over domestic political issues attracted a high average number of participants but only half the over-all total for incidents motivated by foreign political issues.

The second major portion of the content analysis of *The Globe and Mail* dealt with an evaluation of the nature of the journalistic coverage accorded the incidents of collective violence. Inspired by Richard Budd's concept of "attention score", a specially designed coding scheme was devised to fit the idiosyncracies of *The Globe and Mail*.[19] Every report of an

incident of collective violence was evaluated as to the prominence of its placement in the particular edition, its use of accompanying photographs, and the total volume of each item in square inches. After the initial report of an incident, the follow-up coverage of the event was examined for seven subsequent publishing days. An effort was made to extract as much information as possible about the character of coverage as a means of providing some insights into the particular orientations journalists have in covering various types and forms of collective violence.For example, each accompanying photograph was evaluated as to whether it pictured the actual violence of the event or was merely used for general background purposes. As well, the news source of every item was noted, along with whether there were any editorials or political cartoons related to the story.

The systematic format of *The Globe and Mail* greatly facilitated the task. In designing the coding scheme a typical edition was divided into several portions based on the concept of prominence. The "news section" or prime reporting area was considered to be the five pages before the editorial page. Placement of an article on the first page is indicative of the highest degree of prominence. Front-page articles were divided into three categories: headline articles above the fold, non-headline articles above the fold, and articles placed below the fold.

After sampling a number of editions, it was decided that the rules of the coding scheme would allow for only one headline story per edition and that this determination would be based on the size of the headline type and the total volume of the story. A "headline" refers exclusively to the upper portion of the first page. Thus, non-headline articles above the fold and all stories appearing below the fold were judged to be of somewhat less prominence. It was considered problematical to establish a weighting scheme for other positions in the paper. The placement of articles within the first section of the newspaper but after the editorial page as well as that of reports in other portions of the edition was noted but not assigned a particular prominence value.

A similar coding scheme was developed for photographs, with the highest scores going to those actually picturing the action of the incident and accompanying a headline article.[20] Background photographs and all those appearing elsewhere in the edition were accordingly judged of lesser prominence. The volume of each article, photograph, and editorial was carefully computed and aggregated for each incident on its first reporting day and for a maximum of seven subsequent publishing days. As a result, a substantial body of descriptive statistics was obtained regarding *The Globe and Mail*'s coverage of acts of collective violence during the past decade. The prominence-volume scores were then correlated with the actual events and a number of useful and instructive patterns emerged.

Over the 11-year period under examination, 76 per

cent of all incidents of collective violence were reported in the prime news section of *The Globe and Mail* (that is, the five pages before the editorial page). Thirty-six per cent of the incidents were reported on the first page. Twenty-five incidents of violence (19 per cent of all incidents) were reported in the upper half of the first page. Ten per cent of the incidents (13) received headline coverage. Forty-seven per cent of all reports had at least one accompanying photograph. Only two per cent (three) of all first reports were accompanied by an editorial.

Follow-up stories are those that appear on subsequent days and clarify and elaborate on the initial report of an event. Forty per cent of all incidents received follow-up coverage. The average follow-up was one article. One case, however, did have as many as 15 subsequent articles within seven reporting days. Fourteen per cent of the incidents had a first page follow-up article Sixteen per cent of the follow-up articles were accompanied by photographs. Twelve per cent of the incidents merited editorials in their follow-up coverage. There were 21 subsequent editorials in all.

The average volume of a first report was 36 square inches, which was considerably less than that accorded an average first report of an act of individual political violence (97 square inches). The range was from five to 222 square inches. The average photo sizes were also 36 square inches. The average first report occupied three per cent of the total news section.

Sixty-two per cent of all articles were general *Globe and Mail* stories; that is, they were unsigned. Thirty per cent carried the byline of a particular *Globe and Mail* reporter. Eight per cent of the stories were wire-service items, all from the Canadian Press.

There is no correlation between the number of people participating in an act of collective violence and the newspaper coverage that it received. In terms of first reports, the news volume devoted to an incident correlates only .11 with the number of insurgents involved. A correlation of .14 was found between the volume in the news section of the first report and the number of insurgents. With regard to total coverage, that is, the volume of all photos and news stories in both the first and subsequent reports, the correlation was .10. Thus it can be stated categorically that these data indicate no relation between the magnitude of the incidents and how the press chooses to handle them.

The evaluation of coverage by issue led to some other interesting findings. When incidents of collective violence over foreign political issues were reported, 89 per cent of the articles were placed in the prime news section. This compares with 80 per cent of the incidents over domestic political issues and 68 per cent of those related to economic issues. In terms of first-page coverage, 63 per cent of the incidents occasioned by foreign political issues received first-page coverage, as compared to 40 per cent of the domestic political and 18 per cent of the economic incidents. Headline coverage

was relatively equal among these three leading categories with 12 per cent of the economic, 11 per cent of the foreign political, and 10 per cent of the domestic political incidents receiving top-priority treatment.

Regarding the three most significant forms of collective violence, 88 per cent of the demonstration-related incidents were reported in the first five pages of the newspaper. This compares with 65 per cent of the strike-related incidents and 68 per cent of the random incidents. In terms of numbers of participants as well as extent of prime news reporting, demonstrations were the most prominent form of collective violence in Ontario. This pattern was also evident on the front page. Fifty-three per cent of demonstration-related incidents as opposed to 36 per cent of random incidents and 17 per cent of strike-related incidents received first-page coverage. While strike incidents tend to be the most intense in terms of numbers of casualties and property damage, as a form of collective violence they are relatively downplayed in journalistic coverage.

The emphasis placed on coverage of demonstrations, as opposed to other forms of collective violence, is also evident with regard to photographs. Of the demonstration-related incidents, 66 per cent were reported with at least one accompanying action photograph, compared to 24 per cent of the strike reports and 12 per cent of the random-incident reports. Moreover, 47 per cent of the demonstration reports also contained at least one background photograph. Twenty-four per cent of the random-incident reports and 16 per cent of the strike reports were also accompanied by a background photograph.

Follow-up, or extended coverage of particular events beyond the first reporting day, is vital in informing the public about complex stories. This task is one of the most important responsibilities of any newspaper. *The Globe and Mail* does evidence a relatively high degree of follow-up reporting.

With reference to the three leading issues that motivated collective violence during the period, 55 per cent of the domestic political incidents received some coverage beyond the first report. Forty-one per cent of the foreign political and 34 per cent of the economic incidents received follow-up coverage.

Most follow-up coverage was found in the so-called news section. Seventy-four per cent of the follow-up coverage for economic incidents, 73 per cent of the coverage for domestic political incidents, and 70 per cent of the follow-up for foreign political incidents were found in the first five pages. In addition to the question of placement within a particular edition, each article was carefully measured as to its volume in square inches.

Table 23 indicates the total news volume accorded to reports of the five principal types of incidents on the first publication day. The highest average volume for a first report is for university-related incidents, which were among the most trivial. Economic incidents

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Table 23

*Volume of First Report According to Issue** (articles only)

	Number	Total Per cent	Average
Economic issues	1876	34.1	38
Domestic political issues	1226	22.3	61
Foreign political issues	1619	29.4	60
Issueless incidents	480	08.7	27
**University-related issues	289	05.2	72

  * All figures are in square inches.
** Only 4 incidents

Table 24

*Volume of First Report According to Issue** (articles and photographs)

	Number	Total Per cent	Average
Economic issues	3564	32.3	71
Domestic political issues	2540	23.0	127
Foreign political issues	3758	34.1	139
Issueless incidents	718	06.5	40
University-related issues	439	03.9	110

  * All figures are in square inches.

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generated relatively low volume per report, but were the most significant in terms of total volume. When the volume of photographs of first report are added, Table 24 emerges. Reports of collective violence motivated by foreign political issues received the greatest average volume as well as the greatest total volume on the first reporting day. This statistic again suggests a strong media penetration by the United States and other countries, in that violent Ontario incidents related to essentially foreign issues received the most significant coverage of all categories.

Table 25 indicates the volume directed to follow-up reports of the five principal types of incidents. Incidents related to domestic political issues generated the most significant average volume for follow-up as well as the highest over-all total for such coverage. While reports of incidents motivated by economic and foreign political issues received more substantial initial coverage, follow-up reports lagged considerably behind. A stronger emphasis on domestic political issues is the more normal pattern and is only clearly evident with regard

Table 25

Volume of Follow-Up Coverage According to Issue*
(articles only)

	Total Number	Per cent	Average**
Economic issues	1024	21.1	60
Domestic political issues	2151	44.4	196
Foreign political issues	929	19.1	84
Issueless incidents	256	05.2	64
University-related issues	483	09.9	120

* All figures are in square inches.
** Average is based on the number of incidents that received
follow-up coverage.

Table 26

Volume of Follow-Up Coverage According to Issue*
(articles and photographs)

	Total Number	Per cent	Average**
Economic issues	1356	20.6	80
Domestic political issues	2764	42.0	251
Foreign political issues	1474	22.4	134
Issueless incidents	256	03.8	64
University-related issues	718	10.9	180

* All figures are in square inches.
** Average is based on the number of incidents that received
follow-up coverage.

Table 27

Volume of First Report and Follow-Up Coverage According to Issue*
(articles and photographs)

	Total Number	Per cent	Average
Economic issues	4920	27.9	98
Domestic political issues	5304	30.1	265
Foreign political issues	5232	29.7	194
Issueless incidents	974	05.5	54
University-related issues	1157	06.5	289

* All figures are in square inches.

to follow-up coverage. When the volume for follow-up photographs is added, the same general pattern remains.

Table 27 aggregates the volume scores for all initial and follow-up articles and photographs. In this final summary table, collective violence motivated by domestic political issues again emerges as having generated the highest over-all volume of news reporting for the period. However, as a category its volume was only marginally greater than that generated by foreign political and economic issues.

Conclusion

The 11-year content analysis of *The Globe and Mail* produced some interesting and important findings. There were in fact four separate content analysis projects, each one providing a different vantage point for the evaluation of violence in Ontario as reported by *The Globe and Mail*. The first project, the random sample of front pages, indicated that the volume devoted to political violence is approximately eight per cent. While this figure is not unduly high, when added to that devoted to war and defence and crime news, the combined percentage is approximately 20. It is quite likely that most readers do not make a clear distinction between the three violence-related categories. Thus, they are confronted on a day-by-day basis with a significant degree of violence reporting on the first page of their newspaper. This statistic is not meant as a criticism of *The Globe and Mail* and its editorial policies, as its correspondents do have a responsibility to report the realities of the world as they see it. The point is that from the perspective of the reader, *The Globe and Mail* contains a substantial degree of coverage of violent events.

The second content analysis project identified the nine incidents of individual or small-group political violence in Ontario for the period. The average initial coverage of each incident was nearly three times as extensive as that of collective violence events. While each incident resulted from a wide range of motivation, the coverage of each was extensive and dramatic.

The third content analysis project identified 129 incidents of collective violence in Ontario from 1965 to 1975. Except for an unusual number of serious labour disputes in 1971, the graph of incidents per year was relatively stable. As a form of violence, demonstrations attracted the largest number of participants. In terms of issues, those incidents relating to foreign political questions attracted the largest number of participants per event and as an over-all total. This statistic suggests a strong American media penetration in Ontario. As stated in Chapter II, the situation in Quebec is quite different, as the incidents there attracting the largest number of participants are those related to domestic political issues. Another significant finding of the third content analysis project is that most collective violence is aimed at human targets rather than property. The

most common scenario was of picket-line confrontations erupting into fist fights. While the number of participants per event was relatively low, the sheer number of such incidents was high.

The fourth content analysis project examined the extent and variety of coverage *The Globe and Mail* accorded to the 129 incidents of collective violence. Articles and photographs related to the incidents were evaluated utilizing a prominence index. From the resulting data, there appeared *no discernible relationship between the magnitude of the incidents and the type of coverage they were accorded.* In terms of the three principal forms of collective violence, the coverage of demonstrations was far more prominent than that of strikes or random incidents. As far as initial coverage of incidents was concerned, disputes over foreign political issues generated more volume of newspaper coverage than did domestic political issues. However, domestic political issues produced more follow-up volume and slightly more over-all coverage. The most obvious conclusion is that Ontario is strongly influenced by American media. Future studies of violence in Canada must take into account the degree to which essentially foreign issues form the basis of unrest in this country.

Chapter Four

Case Studies and Illustrations

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The content analysis projects presented in Chapter III indicate that during the period studied, violence occupied a significant portion of one of Canada's leading newspapers. From the random sample inquiry, it was learned that articles in three violence-related categories together formed approximately 20 per cent of the front-page volume of *The Globe and Mail* over the period from 1965 to 1975. The other content analysis projects identified 129 incidents of collective violence and nine of individual political violence in Ontario. In addition, there are many questions about the reporting of collective conflict and violence that no form of content analysis, however rigorous, can explore. These are, for the most part, logistical problems such as those sometimes encountered by journalists in the pursuit of their profession, or questions about the relations among media personnel, participants, and police at the scene of a violent confrontation.

As a means of deriving additional insights about news reporting of violence and some of the problems newsmen both engender and encounter, a case-study approach was adopted. This method of research opened up a number of new avenues of inquiry.

An incident of collective violence is a complex and dynamic phenomenon. The case-study method seeks to explore the "how" and "why" aspects of such situations in virtually the only way that such questions can be answered. While no claim is made here of scientific validity, none the less an attempt has been made to explore a wide variety of cases with apparent clinical potential. The particular advantage of the case study is that it allows observation in great depth and from a variety of perspectives. The case-study method is not without its limitations and drawbacks, but was judged to be of value given the particular interests of this study.

A selection of six case studies was made from the list of collective violence events in Ontario from 1965 to 1975. A seventh case study, an instance of individual political violence, was added, as it was closely related to one of the collective cases and provided a somewhat different perspective. The seven case studies selected were the following: an anti-Nazi demonstration in Toronto in 1965; a hippie protest in the Yorkville section of Toronto in 1967; an anti-Vietnam demonstration in front of the American consulate in Toronto in 1970; a labour strike at the Texpack plant in Brantford during the late summer of 1971; a personal assault on Premier Kosygin of the USSR during his tour of Parliament Hill in Ottawa in 1971; an anti-Soviet demonstration protesting Premier Kosygin's visit to Toronto in 1971; and a clash between Indians and the RCMP on Parliament Hill in 1974.

The seven were chosen because of the extensive media coverage that they received and also because they seemed to be reasonably representative of the data set as a whole in terms of form, issue, and location. Five of the incidents were demonstrations, one was a strike, and one was an act of individual political violence. Three of the cases involved foreign political issues, three were occasioned by domestic political issues, and one was labour-related. Four of the incidents took place in Toronto, two in Ottawa, and one occurred in Brantford.

At the outset, each case study was meticulously researched from newspapers and other available sources. For example, the anti-Kosygin demonstration in Toronto had resulted in an Ontario Royal Commission Investigation (the *Vannini Report*), while the Yorkville case had been captured in two National Film Board features: *Flowers on a One-Way Street* and *Christopher's Movie Matinee*. A number of briefs were also collected from such organizations as the Canadian Federation of Civil Liberties, the Canadian Association of Broadcasters, the Canadian Broadcasting Corporation, and other news sources. As a means of providing an additional body of data with which to evaluate the case studies, an extensive interviewing project was undertaken. A master list of all individuals mentioned in *The Globe and Mail's* coverage of each case was developed. The list for each incident was broken down into three broad categories: participants, authorities, and media.[1] The term "participants" refers to those who were spokesmen for particular organizations or who were bystanders in a position to make some meaningful observations. It should be clearly stated that the term "participants" is in no way meant to imply that the individual was directly involved in an act of violence.

The term "authorities" refers to those members of the various police forces who were responsible for security at the site of the respective incidents of collective violence. "Media" were those reporters and photographers who were actually on the scene covering the events. A questionnaire specially designed for each of these three general categories was developed, from which a considerable body of interview testimony was generated.[2]

The questionnaire sought to focus on a number of the major controversies regarding the rights and responsibilities of these three general groups. Of particular interest was the nature of the relationship between police and media. As a means of providing the reader with a degree of perspective regarding the seven case studies, there follows a series of brief narratives describing the chronology and major features of each. Following this section is a report of the results of a project designed to sample the internal content of the first articles carried by three different newspapers about each case. Once this background material has been presented, this chapter concentrates on an examination of the opinions of participants, media, and police with respect to the impact of the media on the violence that occurred in these seven cases.

Reported Case Study Narratives[3]
Anti-Nazi Rally

On Sunday afternoon, May 30, 1965, about 5000 people, most of them middle-aged and many of them Eastern European or members of various Jewish organizations, gathered to protest against the holding of a Nazi rally at Allan Gardens. Many of these people had been brought out by the continuous and inaccurate publicity (it was reported that the Nazis had a permit when in fact they did not) that the media had given this event during the preceding week. The protest developed into a near-riot when a mob of about 500 people, many carrying sticks and clubs, made several attacks on youths believed to be members of a Toronto Nazi group. The mob, which was described by news sources as being in an hysterical frenzy, screamed "Kill! Kill! Kill!" as they chased and clubbed the eight victims, all but one of whom were later reported to be innocent passers-by, to the ground, where they were beaten with fists and battered with hunks of wood and tree branches. The incident was broken up within 15 minutes when an estimated 50 police on foot, motorcycle, and horseback fought their way into the mob and dispersed it. Eight members of the crowd and William J. Beattie, self-styled Toronto Nazi leader, were arrested.

Yorkville Demonstration

Yorkville, the then coffee-house (and discothèque) district of Toronto, erupted into violence on the evening of August 20, 1967, during what various reports characterized as the worst outbreak of rowdyism in the village's history. A series of skirmishes began when a crowd estimated at between 3000 and 5000 "hippies" congregated in a one-block section of Yorkville Avenue and attempted to hold a sit-in to protest the city's failure to close the street to traffic as they had requested. In an attempt to break up the sit-in, police waded into the crowd and were reported to have "slapped", "kicked", "punched", and "clubbed" the protestors. There were 50 arrests as a result of this incident, and several people reported injuries, including a number of broken bones. A few days subsequent to this event, a serious controversy arose concerning the participation of a National Film Board crew in some of the incidents, including an individual who had trained the hippies in passive resistance. Some Film Board officials were also reported to have admitted that they had helped manoeuvre some of the Yorkville events previous to the sit-in.

Demonstration at the American Consulate

On Saturday, May 9, 1970, eight days after the American invasion of Cambodia and five days after the killing of four students at Kent State University in Ohio, a protest in front of the American Consulate General in Toronto erupted into what was described as one of the most violent demonstrations in that city since the protests of the unemployed at Queen's Park in the 1930s. This protest at the consulate had been preceded during the week by two smaller demonstrations in which about a dozen demonstrators were reported to have been arrested. At this Saturday protest, about 5000 people variously affiliated with the Vietnam Mobilization Committee, the Canadian Party of Labour, and the May 4th Movement were directly in front of the consulate. The protest escalated to violence when mounted police rode into the crowd in an attempt to disperse it. At this point, fights broke out and earth from flower-beds, bricks, stones, and firecrackers rained down on the 250 police officers. After the mounted-police charge forced demonstrators away from the consulate, several hundred people streamed through downtown Toronto smashing windows in several department stores and causing about $7000 worth of damage. Ninety-one arrests resulted from this incident and several injures were reported, including six to police.

Texpack Strike

A lengthy strike by workers of the Texpack plant at Brantford led to a series of five episodes of collective violence in the late summer of 1971. The strike at Texpack, a manufacturer of hospital bandages, began following a walk-out on July 16. On August 12, the Ontario Supreme Court issued an injunction limiting the number of pickets to seven. Efforts by Texpack officials to replace striking workers with scabs bused in from Hamilton and other near-by communities, led to an angry confrontation on August 25. Police and firemen were attacked by strikers, and a considerable

degree of vandalism ensued. In September, the Texpack strikers were joined by representatives of other unions and by members of the Waffle group of the New Democratic Party. During the course of the dispute, an attempt was made to relocate the Texpack operation in Rexdale. While the immediate issue of the strike was a demand for a wage increase of 65 cents per hour, the tactics of the American-based company generated substantial support for the strikers. On September 14, two York University professors were injured by a bus carrying a large number of non-union workers. The tension at the Texpack plant continued until October 18 when a compromise was reached between union and management that granted a 44-cent increase over a two-year contract. During the prolonged strike, 65 people were arrested on some 100 charges.

Incidents Related to the Kosygin Visit

On October 18, 1971, a lone attacker broke through the rear of a crowd and attacked Soviet Premier Alexei Kosygin as he walked with Prime Minister Pierre Trudeau just outside the East Block of Parliament. Geza Matrai, a 27-year-old Hungarian refugee, Toronto member of the Edmund Burke Society, and provincial Social Credit candidate, burst out of a crowd of 200 to 300 Jewish and Latvian demonstrators, leaped a wooden barricade, and butted through reporters, cameramen, and plain-clothes security police. Shouting "Freedom for Hungary!", Matrai jumped on Kosygin's back and got a forearm around his neck, almost dragging him to the ground. He was torn away and pinned to the ground by half a dozen RCMP officers. Kosygin was shaken but unhurt, and Matrai was carried away and charged with common assault.

Eight days after the incident in Ottawa, Soviet Premier Kosygin was the object of another violent protest in Toronto. On the evening of October 25, 1971, an estimated 14,000 demonstrators were protesting in the vicinity of the Ontario Science Centre where the Soviet Premier was attending a dinner given by the Canadian Manufacturers Association. Directly across from the Centre were about 3000 to 6000 people, members of various Ukranian, Bulgarian, Lithuanian, and Latvian groups. There were also reported to be a number of members of the Edmund Burke Society in the crowd. As demonstrators began pressing against police-security lines, some in the crowd began to hurl debris at police. After a short time, mounted policemen charged into the chanting crowd to restrain them. This manoeuvre was repeated several times, with a full-scale confrontation ensuing as police began to beat protestors with clubs and riding crops. The confrontation lasted about 20 minutes and resulted in 20 arrests and injuries to 11 people, including five policemen. A Royal Commission investigation was initiated to look into the conduct of the public and the tactics used by the police in dispersing the crowd.

Indian Demonstration

On September 30, 1974, in an incident designated by the media as the "Battle of Parliament Hill" the RCMP put down attempts by several hundred Indians to enter the Centre Block of Parliament. The Indians, most of whom were members of the Native Peoples Caravan, coming from as far away as Vancouver, had assembled on the Hill to demonstrate for improved social and medical services and the settlement of territorial claims. They were joined on the Hill by several members of the Communist Party of Canada (Marxist-Leninist). There they were confronted by unarmed Mounties and a 100-man Canadian Forces Honour Guard, present for the opening ceremonies of the Thirtieth Parliament. As the Indians marched towards the Centre Block, about 200 of them charged the police barricade and began scuffling with the RCMP. Others in the crowd were reportedly flinging heavy stones, sticks, and broken bottles, and setting fire to the shrubbery below the steps of the Centre Block. Busloads of RCMP reserves, including a riot squad with helmets, shields, and clubs, were called in as reinforcements and forced the demonstrators back to the main lawn in front of the Parliament Buildings. In the "battle" that continued sporadically for three hours, 15 people were arrested and 20 injured, including ten members of the RCMP.

Comparison of Three Newspaper Styles

While the four content analysis projects described in Chapter III produced a substantial body of empirical data regarding *The Globe and Mail's* reporting of violence, an important element of news coverage was not explored. Content analysis was utilized to collect events data, which essentially dealt with the basic question "Who did what to whom?" Attention was paid to the extent and variety of coverage accorded certain types of collective violence. The degree of prominence a story received was judged on the basis of its placement within the particular edition, whether it had accompanying photographs, and its total volume in square inches. Such measurement techniques are unquestionably valid and do provide important insights, but one should not completely overlook another type of content analysis. A second broad application of this technique is generally referred to as "evaluative assertion analysis" and was pioneered by the work of Charles Osgood et al.[4] This type of content analysis seeks to explore the internal logic of a particular piece of written or spoken communication. Its purpose is to detect subtle implications suggested by the choice of certain words or the placement of particular phrases within the text. While an appreciation of the tone and emphasis of particular articles is vital to an over-all understanding of the news event, the precise measurement of such variations is often problematical. As a means of introducing some degree of methodological rigour to this difficult measurement problem, Osgood has introduced the "semantic differential scale"

to weigh words on a positive to negative continuum. Specialized "dictionaries" are developed based on the evaluations of a panel of judges regarding the particular meanings of certain words. Thus, a sample of communication can be broken down to its basic elements and subjected to precise measurement.

While this form of content analysis does provide interesting insights into the structure of the thought patterns of the speaker/writer, it was not considered to be appropriate for this project. Instead, a modified version of this form of internal content analysis was developed to provide an evaluation of the over-all impact of a selected sample of articles. This form of analysis makes little claim to being scientific but rests instead on a series of informed, but impressionistic observations.

For the purposes of this analysis, each article in the sample was subjected to a series of evaluations regarding the degree to which it was informative and reasonably balanced. Our observations were based on a limited sample, and thus are not meant to generalize about any particular newspaper's credibility or journalistic practices. The principal concern was to compare the coverage accorded by three leading Ontario newspapers to the seven selected incidents of violence. From this side-by-side evaluation, a number of observations can be made regarding the extent and variety of journalistic treatment of identical events.

For the seven incidents that form the case studies explored in this chapter, a special chart was developed to take note of such considerations as article placement, use of accompanying photographs, and the degree to which the issue prompting the incident was thoroughly explained.

The sample of newspaper articles was derived in the following manner. The first major article reporting the actual confrontation was examined from three newspapers: *The Globe and Mail, The Ottawa Citizen,* and *The Toronto Star*.[5] The three articles relating to each incident were evaluated on a variety of criteria with particular emphasis on the general tone of the piece as well as whether the grievances underlying the event were discussed. With each article, the analyst sought to determine whether or not the general public would have been adequately informed about the particular incident. From our review of the articles on the seven incidents, significant differences in coverage were observed.

The first set of articles reviewed dealt with the anti-Nazi demonstration in Toronto in May 1965. All three newspapers, especially the *Star*, stressed the hostile and perhaps even "animalistic" nature of the crowd. The *Star* had the largest volume devoted to this story and the largest number of photographs. The *Star* coverage dwelt on the actions of the crowd and a thorough description of the violence. The *Citizen*, using Canadian Press copy, makes no mention of the issuing of a

Table 28

Anti-Nazi Demonstration — May 31, 1965[6]

	Front-Page Story	Head-line	Article Heading Informative	Photo-graphs on Front Page	Descrip-tion of Photo-graphs	Issue within First three Para-graphs	Issue within Total Article
The Globe and Mail	yes	yes	yes-to the point, although slightly dramatic	1	action	yes	yes
The Ottawa Citizen	yes	no	not all information given	1	action	yes	yes
The Toronto Star	yes	yes	yes, but dramatic (consistent with tone of article)	3	action	no	more emphasis on what happened than on why it happened

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demonstration permit to the Nazis, which was a key element in the story. *The Globe and Mail* specifically mentioned the radio promotion for the Nazi rally as a major cause of the disturbance. The *Star* reported this key fact only in an incidental fashion. The tone of all three articles was dramatic.

The second set of articles dealt with the violent clash between police and hippies in Yorkville in August 1967. In neither of the Toronto papers was there an adequate explanation of the issue at stake in the first report of the incident. The *Citizen*, once again using Canadian Press copy, mentioned the issue very succinctly. *The Globe and Mail* appeared to be sympathetic to the demonstrators, whose treatment by police was described in considerable detail. The issue prompting the confrontation, however, was discussed in only one paragraph. The *Star* took a sarcastic tone with reference to the hippie movement. The *Star*'s coverage seemed to be obsessed with the mystique of this phenomenon. For *The Globe and Mail* and the *Star*, Yorkville was a front-page item, while the *Citizen* relegated its article to page ten. This is a clear indication of the impact of distance as a variable in the prominence given to certain news.

The third set of articles examined dealt with a major anti-Vietnam demonstration in Toronto following the shootings at Kent State University in May 1970. This demonstration was given substantial front-page coverage in all three newspapers. *The Globe and Mail* paid considerable attention to a detailed description of the sequence of events. In tone its article appeared to be sympathetic to the demonstrators, although both sides of the dispute were presented. The *Citizen*'s account was concise but informative with regard to the major elements of the story. Its headline was quite emotional while the content of the article itself was reasonably dispassionate. The *Star*'s coverage put prime emphasis on the question of outside agitators and a detailed description of the route the demonstration took when leaving the consulate. The *Star* also condemned the demonstrators for inciting violence. The issue that prompted the demonstration was mentioned in one small paragraph.

The fourth set of articles dealt with the strike at Texpack in Brantford. Although this labour dispute stretched over three months and involved at least five major incidents of collective violence, the coverage here relates only to the first confrontation with police in Brantford in late August 1971. All three papers convey the impression of a menacing and almost animalistic "mob". *The Globe and Mail*'s article, the only front-page coverage given to this event, dealt with all aspects of the story. The sequence of events, the violence of the demonstration, and the issues at stake were all mentioned in *The Globe and Mail*'s first report. The

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Table 29

Yorkville Demonstration — August 21, 1967

	Front-Page Story	Head-line	Article Heading Informative	Photographs on Front Page	Description of Photographs	Issue within First three Paragraphs	Issue within Total Article
The Globe and Mail	yes	yes	yes-main information given, but somewhat dramatic	1	action	yes	yes, but not in depth
The Ottawa Citizen	no (p. 10)	—	To the point, but along with photographs gives a biased impression	1	action	no	yes
The Toronto Star	yes	—	yes, but may be misleading	1	action	no	yes, but mentioned incidentally

Table 30

Anti-Vietnam Demonstration — May 11, 1970

	Front-Page Story	Head-line	Article Heading Inform-ative	Photo-graphs on Front Page	Descrip-tion of Photo-graphs	Issue within First three Para-graphs	Issue within Total Article
The Globe and Mail	yes	yes	dramatic—"Shatter windows during chase"—but explanatory	1	action	yes	—
The Ottawa Citizen	yes	yes	dramatic—"downtown rampage", "riot shocks Toronto"	1	action	yes	—
The Toronto Star	yes	yes	explanatory, but not very illuminating	3 (2 on second page)	first-page photograph only re-lated to incident; second-page photo-graphs are action	no	yes

Citizen carried a brief Canadian Press story relating the basic elements of the incident, but provided no expla-nation of why the strike occurred originally or why the violence erupted. The *Star*'s article focused strongly on the actions of the demonstrators, while making no mention of the issues related to the strike.

The fifth series of articles dealt with the personal assault on Premier Alexei Kosygin of the USSR while he toured Parliament Hill in October 1971. The attack on Premier Kosygin was the only example of individual political violence chosen for close scrutiny. Unlike the cases of collective violence, the criterion of "issues" is not entirely relevant. All three newspapers stressed the national disgrace of the attack and the fallibility of the security forces. *The Globe and Mail* and the *Star* stressed the grave implications of this incident, while the *Citizen* displayed a matter-of-fact tone. *The Globe and Mail* and the *Citizen* both presented considerable detail about the logistics of the attack. The *Citizen*, publishing an afternoon edition, carried the story on the same day it occurred. The headlines of all three articles were somewhat emotional, perhaps justifiably.

The sixth group of articles dealt with the major anti-Soviet demonstration that occurred during Premier Kosygin's visit to the Ontario Science Centre in Toronto in October 1971.

All three newspapers chose to deal with the issues prompting the demonstration only indirectly – by reporting some of the placards carried by the protestors. None of the papers featured the incident as the headline story of the day. Moreover, the *Star* did not carry a picture of the violence to accompany its first report of the incident. In describing the event, all three newspapers emphasized the unravelling of the demon-stration and the traffic jams that ensued. However, each newspaper was quick to point out the innocence of the crowd in the violent clash that developed. Only the *Star* printed comments from some of the demonstrators regarding their perceptions of police brutality. The *Citizen* appeared to be considerably downplaying the incident by placing it on page 19 and inserting an exceedingly mild article heading. Again perhaps, the factor of distance was responsible for the marked differ-ences in coverage.[7]

Table 31

Texpack — August 26, 1971

	Front-Page Story	Head-line	Article Heading Inform-ative	Photo-graphs on Front Page	Descrip-tion of Photo-graphs	Issue within First three Para-graphs	Issue within Total Article
The Globe and Mail	yes	no	yes; to the point, main information given	no	—	no	yes
The Ottawa Citizen	no (p. 53)	no	not at all— violence inferred, but why or where not clear	no	—	no	no
The Toronto Star	no (p. 48)	no	dramatic— far from explana-tory	no	—	no	no

Table 32

Kosygin Attack — October 18, 1971

	Front-Page Story	Head-line	Article Heading Inform-ative	Photo-graphs on First Page	Descrip-tion of Photo-graphs	Issue within First three Para-graphs	Issue within Total Article
The Globe and Mail	yes	yes	yes—to the point	2	action	N.A.	N.A.
The Ottawa Citizen	yes	yes	yes—to the point	1	action	N.A.	N.A.
The Toronto Star	yes	yes	yes—but not completely clear	no	—	N.A.	N.A.

Table 33

Kosygin Demonstration — October 26, 1971

	Front-Page Story	Head-line	Heading Inform-ative	Photo-graphs on First Page	Descrip-tion of Photo-graphs	Issue within First three Para-graphs	Issue within Total Article
The Globe and Mail	yes	no	yes, but no mention of what protest is against	1	action	no	indirectly
The Ottawa Citizen	no	no	not at all completely misleading as to nature of story	1	action	no	indirectly
The Toronto Star	yes	no	vaguely—highlights of the most dramatic instance of the story	no	—	indirectly	indirectly

Table 34

Indian Demonstration — October 1, 1974

	Front-Page Story	Head-line	Article Heading Inform-ative	Photo-graphs on First Page	Descrip-tion of Photo-graphs	Issue within First three Para-graphs	Issue within Total Article
The Globe and Mail	yes	no	yes—leaves impression of "cowboy versus Indian" story	1	action	no	yes
The Ottawa Citizen	yes	yes	highly sensational and not at all informative	3	action	no	no
The Toronto Star	yes	no	not very informative, but along with photo-graphs gives a clearer picture than others	3 (2 on second page)	action	no	yes

The last set of articles dealt with a confrontation between native Indians and the Royal Canadian Mounted Police on Parliament Hill on September 30, 1974.

The article in *The Globe and Mail* portrayed the clash on the Hill as a stock "Indian versus white man" movie plot, with the white man as hero and the Indians as the instigators of the violence. Statements from both sides were presented, although the issues prompting the incident were not clearly stated. The *Citizen* coverage featured a sensational banner headline across the entire top of the front page. The tone of the article follows from the headline and exhibits shock. The *Star*'s coverage was more dispassionate, centring mainly on impressions of Trudeau, the Indians, and the authorities. There was, however, no clear indication of what the Indian demands were. In fact, none of the three papers offered an adequate explanation for why the Indians wanted to gain entrance to Parliament.

While this language-sampling exercise is admittedly impressionistic, it has yielded a number of interesting results. First of all, there was a substantial difference in the degree of prominence and general tone of the accounts of the particular events. From this limited sample, it was clear that most coverage was focused on what happened rather than on why it happened. Only the most meticulous reader would have been able to determine exactly what had prompted a particular incident of violence. On the other hand, the reader was given a clear idea of the editorial opinion of the particular newspaper by the intensity with which it condemned the use of violence in each case. From this limited exercise, it is obvious that the same event can generate substantially different coverage. We shall now proceed to explore through interview testimony some of the practical problems that may influence the sort of coverage particular stories may receive.

Case-Study Testimony

While this study has not uncovered any evidence of a relationship between the media and collective conflict and violence in terms of a direct causal sequence, there nevertheless remains a number of other ways in which the media have been seen to affect civil unrest. As illustrated in Chapter 1, the Eisenhower and Kerner commissions as well as the Surgeon General's report all offer some evidence that although the media may not actually cause violence in an etiological sense, they might in some instances aggravate or exacerbate certain aspects of conflict. For example, it was suggested that the very presence of the media at the scene of a demonstration or strike could become a factor in the dynamics of the conflict situation. The presence of large number of media representatives – in particular, camera crews with their lights, cables, and other equipment – in a crowd of protestors has frequently been found to complicate crowd control and sometimes adds to the general confusion and chaos. Evidence uncovered by

the Royal Commission of Inquiry in Relation to the Conduct of the Public and the Metro Toronto Police in the Kosygin affair relates directly to this problem. In the opinion of the author, the media – especially television crews – stimulated and added to some of the turmoil and confusion during the riot in front of the Ontario Science Centre.[8]

In another, yet related, sense, it has also been proposed that the presence of the media may have a tendency to transform the character of an incident, because strikers and demonstrators attempt to manipulate the press to obtain headlines. The event becomes a sort of stage drama with the protestors playing to the cameras.

Possibly a much more polemical and problematical aspect of the media-civil unrest relationship begs the question of what news is. A fundamental question arises as to whether the newsworthiness of an incident of conflict is based exclusively on the occurrence of violence, or whether the media have a further obligation to inform the public by conveying the message that the protestors, or even the authorities, are attempting to present. More directly – can the form that a protest takes be isolated from the content of the protest? Understandably this is a very contentious issue. It would appear, however, that the tendency of media to give prominence to the violent aspects of a dispute while at the same time providing inadequate discussion of the issues can essentially lead beyond the reporting of news to the actual creation of news. This can both misrepresent the event and mislead the public. While the concept of censorship is anathema to most journalists, this pre-selection of news may in itself be seen as constituting a form of censorship. To the extent that demonstrations and other forms of protest are generally directed at the public via the media, the societal implications of this practice are profound.

An attempt to examine these various controversies was made through a series of interviews based on the seven case studies. A general list of names was compiled from various newspaper reports of the incidents. Several additional names were obtained in the course of some of the initial contacts.

The sample of interviewees was divided into three groups – participants, media representatives, and authorities. All individuals interviewed in each of the three categories were either involved in one of the events or were in a position to make informed observations.

A specific questionnaire was administered to each group. There was some overlap among the three questionnaires, which consisted of several general media-violence questions and a series of questions relating to the particular incident with which the respondent was associated. (See Appendix F.) Generally, each of these interviews attempted to focus on some of the controversies outlined above or discussed in

earlier chapters. Particular emphasis was placed on questions of police-press and participant-press interaction at the scene of a disturbance, and also on the form-content or the violence-versus-issue dispute. The following pages, therefore, make no attempt to seek an objective appraisal of the events themselves, but constitute a survey of opinions on media-violence relations.

Participants

Interviews were conducted with 17 individuals who had participated in one of the seven incidents either directly or as unofficial observers. At least one participant was interviewed for each of the case studies with the single exception of the Kosygin assault incident in Ottawa. Unfortunately, none of the principals involved in this particular incident was accessible. The interviews conducted with the participants attempted to focus on several general topics, including their perception of the function of the demonstrations and the tactical uses of violence, confrontation, and escalation with respect to media coverage. Consideration was also given to whether the media coverage of the incident gave undue prominence to its violent aspects.

With respect to the function of demonstrations, most of the participants interviewed considered their protest activity to have been a conscious exercise in media manipulation. Their ultimate objective was not only to manifest discontent but, according to most of the respondents, to gain recognition, sympathy, and a wider audience.

In any demonstration there's no purpose in being out demonstrating if you're not going to get media coverage. . . . If you have a demonstration and no one [the media] shows up, it's not worth having. . . . If there's no media coverage, there's no effect from it. I've been involved in demonstrations in the prisons recently, over the last two summers, and what we've found is that, for instance, at Millhaven and the BC Pen a year and a bit ago when they had a hunger strike nation-wide, and a reasonably effective one, there was no media coverage of it, and it put no pressure on the administration. This year's [strikes] received a little bit better media coverage. We're a little bit better at manipulating the media in relation to the demonstrations, and it put a little more pressure on the administration, brought a few more approving editorial comments. That to me is what demonstrating is all about; it's just solely an exercise in manipulating the media.

It is only after something happens that the media is responsive and then only to a degree.

That [to get media access] was the entire purpose of this thing [the Kosygin Demonstration].

While there may have been a consensus among most participants and observers concerning the generalities of the demonstration-media exposure strategy, the idea that violence was an integral part of this strategy was not accepted by the majority of those interviewed. It was the observation of a prominent civil libertarian, as well as of several of the demonstrators, that there were

no deliberate attempts to incite violence to get media attention. Nor did these individuals perceive any attempt on the part of the demonstrators to play to the media. Nevertheless, there were a few individuals who did view confrontation politics as a useful tactic in gaining publicity. One respondent even considered it more a necessary than a useful tactic because of what he considered to be the media's ever-changing threshold of what constitutes news.

My general impression is that [playing to the media] isn't the way it happens. Undoubtedly, there are situations where that does happen, but I haven't been in any situation so far where I've seen someone deliberately try to engage in a violent act in order to get coverage.

It's hard to say – probably not. If a person was getting hassled by a cop, and the cop was beating him up, then the person wouldn't have time to notice a cameraman in the midst, because he would be too worried about himself to put on an act for the camera.

. . . nobody was there to make a scene for the media. At least nobody that I know.

Create a confrontation and create an incident. What you say doesn't matter; you create the confrontation and get the publicity. It's an interesting trick. The press falls for it every-time.

In my opinion what happened was that to get the same media coverage you had to put on a bigger extravaganza each time. . . . You had to keep escalating your mode of demonstration to get the same media coverage. As I said, there's no purpose in having a demonstration unless you manage to communicate to people who aren't there that there are a significant number of people taking a particular position.

Conversely, there were several participants who offered the opinion that the media frequently played an active and even sinister role in the occurrence of violent conflict. This was seen to happen indirectly through the publicity and the projections of confrontation and violence that often emanate from the news media prior to an event. In a more direct sense, it has also been alleged that the media have indulged in the actual manipulation of the demonstrators, and the orchestration of the scenario, as was charged in the Yorkville incident.

It [Allan Gardens] became a major event. It was somewhat media-created by pre-publicity. . . . All the curiosity-seekers came. Radio reports that morning did build the crowd.

Starting two days prior, the media, and specifically in this case the radio stations, were putting on blurbs every 15 minutes about going to Allan Gardens.

I think it's very frustrating for a TV crew when they come out to a demonstration and everything is quiet. They call on people to arrange themselves in certain ways to make a more dramatic shot and this can spill over into creating news. This may or may not interfere with the public's right to protest and to make its protest heard, but it certainly interferes with the public's right to get an honest news story.

Despite these very different impressions about the relationship between the use of violence and media interest, the majority of those interviewed expressed

considerable consternation at the way the news media covered their protest. Most of this displeasure centred around the perceived tendency of the media to concentrate exclusively on the dramatic and violent aspects of the incident at the expense of the issues and grievances that motivated the protest.

I think they [the media] did emphasize these confrontations at the corner and the fact that there was an injunction. The media tried to portray the people who were supporting it as violent types who were interested in stirring up trouble. It wasn't so much that they were concerned about justice for the women at the plant.

Generally, the press isn't interested in why it happened, just what happened. Allan Gardens was a one-day wonder. . . . The issues weren't discussed. They were totally downgraded in the report of violence.

They [the "capitalist press"] have generally used violence or focused on violence to avoid looking at real issues. They have generally avoided looking at the substance of why people are demonstrating. I think that's been a real failure of all the media here, certainly the newspapers.

If an incident lasts for two hours and there are one-and-a-half minutes of yelling, screaming, and pushing, that's what gets on TV of course. The 98 minutes when nothing is happening does not get on.

The real purpose of the demonstration was lost in the shuffle. The concentration was on the dramatic. . . . There was more interest in trying to paint the people who had come there as violent than in trying to find out why they were there. . . . In my opinion it was a question of selling newspapers.

I think the press and the media dwell on the violent aspects. Of course sensationalism sells papers better than a cold recounting of issues or a reasoned discourse; this doesn't appeal to the reading public. But a lurid description of violence, and if you can get some pictures, that makes it easier to get readers to buy the paper. I think they do exploit violence unnecessarily for commercial gain.

Sure [the media focused on the violence], that's all the media wants. They don't want anything that is even semi-intelligent. That doesn't sell newspapers. . . . Most radio and TV shows assume that everyone in the country is an idiot and that the only thing they are interested in is somebody getting whacked on the head, somebody getting murdered, and all the details on how somebody chopped somebody up and so on. They figure this is what sells newspapers.

There was no discussion of issues. The Canadian public is not too issue-oriented except when it comes to hockey games. . . . The issues in this case were genuine, but they were overlooked completely.

The content of the protest tended to get swallowed in the press coverage.

Moreover, in two specific instances individuals insisted that the news media focused intentionally and exclusively on the dramatic and sensational aspects of an incident, while evidencing little or no concern about why the discontent was expressed. Furthermore, in one of these cases, it was also suggested that the press consciously misrepresented the protest and the elements involved.

Any time the Jewish Defense League came out with a statement it was all over the front page. Any time the Canadian Jewish Congress said something it was either not printed, or any time we sent them something it emerged in an obscure part of the paper. And what the JDL said at that time was in every case threatening violence. Even though the JDL represents an infinitesimally small segment of the Jewish population here. . . . the JDL was given total attention. The impression was because some obscure group representing nobody makes a cock-eyed threat that Kosygin will not leave Canada alive, that Jews were out to kill Kosygin. This fanned the fire. . . . the Jewish protest lost out in the face of violence. The press was only interested in the threats of the JDL and the riots at the Science Centre.

There was the drama of two professors injured in the strike. But the press never interviewed me. They never tried to find out what happened. . . . I was very embarrassed that I should have got the publicity that distracted attention from the way the women pickets were being treated, because not only were they suffering economically but, as always happens, people on the picket-lines were being roughed up at the very least.

Evidently most of those interviewed attributed the media's emphasis of the violent aspects of conflict to the intensity of the competition among the various media. There were several others, however, who attributed more insidious motives to the news media. A number contended that the practice of focusing on the violence is undoubtedly intended to discredit the validity of the issues and the legitimacy of the protest groups.

Some of the media would concentrate on, or emphasize, violence as a means of discrediting the objective of the student movement in the sixties. If you portray the actions and outlook of a small percentage as being characteristic of the whole movement, you may convince people that the whole thing is rotten.

Nobody in this country has really been accepted except the Anglos. This is where it starts. If you're not an Anglo, you're not accepted. . . . Any time that any ethno-cultural group or anyone who is not Canadian (and Canadian means Anglo-Saxon 100 per cent) raises his head in any issue, whether it be a change in the educational system, electing a Member of Parliament, or he makes some kind of specific political demands – even though in almost all instances it is for the good of the whole country – it is looked upon as being unCanadian, and in this country protesting on the whole is looked upon as non-Canadian. But if it's done by a "non-Canadian group" even though you're born here, that's looked upon as unCanadian, as meddling into someone else's business, et cetera, et cetera.

When there is this editorial line [re demonstrations due to long-haired American draft dodgers] the individual reporter is on notice that this is the way to get space. This slants stories. A large percentage of reporters are influenced by the editorial tone. . . . The manner in which the press responded to the police action on this and other occasions was not a question of the time available for reflection but a question of not looking with honest eyes at what they saw. This was based on the knowledge of what would be acceptable to editors. . . . That introduces an element of prior slanting on the part of reporters.

Authorities

Seven interviews were conducted with representatives of various police forces in Ontario. These included one

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senior police officer in Brantford, five senior police officers in Toronto, and a representative of the Royal Canadian Mounted Police in Ottawa. These interviews focused on such concerns as how the media obtains information about violent events, police guidelines governing the dissemination of information, and the potential role of the media in stimulating and encouraging violence by their conduct on the scene. An examination was also made with respect to the suggestion of the *Vannini Royal Commission Report* that some types of media equipment may exacerbate and complicate conflict situations.

In probing media coverage of violent demonstrations and strikes, the source of some of the basic information in the press is not always entirely clear. Most of the police officials interviewed maintained that there is an attempt to cooperate with the press and coordinate information. Some police forces have media-relations officers, but in general any cooperation is contingent on the senior officer at the scene of the event. This individual is usually the sole person empowered to talk to reporters. It may be interesting to note, however, that some of the police officials contended that in the final analysis, the newsman usually makes his own estimates.

We have a media-relations officer, first of all. He is usually kept aware of what is transpiring in a major operation. In addition to this, the commander of the major operation, who is usually a commissioned officer, is authorized to give certain general information to the media.

If they approach the senior officer who is in charge of the scene, and if it's convenient, that officer usually provides whatever information is necessary or required.

[They] ask officers in charge with respect to numbers involved, but will strictly take their own numbers in the end anyway. . . . The arrest figures come out of the station wherever arrests are processed.

There's a limit to what we can give them at the time – we have to do our job. Usually the commanding officer on the scene is empowered to release whatever information is available. They'll want to know estimates of the crowd, what the problems are. Generally we do tell them.

We had tried, although not in a concentrated effort, to have information officers. Unfortunately, they have the idea then that we're watering it down, and we're not giving them [the truth]. So they want to go in and get their own facts.

Apart from this cooperation, there apparently exists no official structure or even a set of guidelines to govern the sharing of information between police and news reporters in Ontario. No indication about the existence of facilities providing direct access to police officials appeared in our interviews. Official police-press contacts are usually limited to *pro forma* exchanges of information, such as crime-occurrence sheets and prepared releases.

We make available to all members of the media information on crime that occurs daily in the metropolis. We prepare a 24-hour crime-occurrence sheet.

Yes, as I understand it, the press have a – what should I say – some facilities provided for them at police headquarters. Most information that comes to hand – where they might be interested – is provided generally through the facilities of the inspector on duty at the police headquarters. He, in fact, distributes the various information periodically throughout the day to all the media.

There's an open line at headquarters that's under the control of the deputy police chief of the CID, who looks after that end of it. Anything at all that comes through is given out to the press.

There appears to be an inherent distrust and animosity regarding the quantity and quality of press releases. The impression is given that the police, at their discretion, make available to the press only the most basic items of information. Obviously, the press for its part attempts to obtain whatever information it can and then reserves the right to decide which items should be made public knowledge. One police official pointed out that, because of this stance, the media, as the guardian of the public's right to know, do not have a great deal of credibility in police circles.

Their [reporters] apparent feeling is that they have a sacred duty to let the public know what's going on – unfortunately, they are not as objective as they might be in this regard.

As noted previously, one of the major controversies of police-press relations centres on whether the presence of media representatives at the scene of a confrontation makes the work of the police more difficult. A number of police officials suggested that newsmen sometimes interfere with policemen doing their duty, and frequently add to the confusion that often pervades the scene of a disturbance.

Generally you find most of them are very good in this regard. We had a fairly good working relationship with them. But again we have people who want to become "Number 1" – want to be a little more aggressive, et cetera.

If a reporter gets over-exuberant and becomes part of the crowd, he will be treated as one of them.

The police have the problem naturally of where, with all respect to them, quite frequently they [reporters] get in your way rather than be a help to you. When I use that term "get in your way" I mean they will insist on getting into the thick of it; and possibly you've got a problem you're trying to get squared away and they're on your tail. It's not always convenient.

Suppose there is an arrest being made – the photographers will flood to that area to try and photograph the arrest being made – each with his own interest in mind. Each wants to obtain the best possible photograph for his newspaper or television station – whatever the case may be. So they do interfere, to a certain extent, with police officers.

The presence of cumbersome media equipment was specifically pointed out as a difficulty facing the police. A number of those interviewed expressed the opinion that such equipment on the scene unnecessarily complicates and exacerbates the problem of crowd control. Television cameramen and still photographers were especially cited by policemen in this regard.

Yes, to a certain degree it is a problem. They have for the most part two men that operate a television camera – one carrying the sound and battery equipment and the other one carrying the actual camera. Just the fact of having two men moving through a crowd or moving through police lines with this type of cumbersome equipment is awkward for us.

It is as you might expect. When you've got a confrontation going on, you're dealing with four, five, six hundred, a thousand, two thousand people, and their cables and equipment sometimes can get in the way.

No, I never had a problem of a hindrance. There have been occasions where the people of the media has been bowled over, knocked down in melees – because they want to get where the action is.

It was also alleged that the presence of the media on the scene adds yet another element to the dynamics of the confrontation. Most of the police officials seemed generally aware of the interrelationship between public protest and the media. Yet many apparently feel that the presence of the media, albeit unavoidably, serves as a catalyst provoking the protestors to escalate their tactics to hold media interest.

An inactive crowd notices the presence of a camera. "Hey – here comes a camera, let's do something." I've personally seen that.

I couldn't give you a percentage, but it's quite apparent that some people will act up when they see the media there and they will act up when they see cameras focused on them. It's not a general thing, but it does happen.

Some of them do [play to the media], some of them don't. This will happen on occasion – more with the younger people. Particularly with the Anti-Vietnam-War demonstration.

Oh, there's no question about the demonstrators playing to the media. That Kent State deal that you're referring to now – we know definitely – without any shadow of a doubt – that they notified the media. They were going to be there to get as much publicity as they possibly could and then went one step further. As soon as they had the media there – making use of the media to further their own ends – they conducted a show disturbance in order to be picked up by the police and put into a wagon - or put into a police car. They made sure the media was there to get the pictures – the media was all over. "Look that's what the law enforcement agencies are doing to us." Now we know for a fact that happened down there on that instance. We know it definitely.

That is the whole purpose of a demonstration. Why do you think that people in Canada demonstrated against the Vietnam War? Just for the purpose of walking down in front of the consulate? No, they wanted media coverage. Canada wasn't at war with Vietnam, had nothing to do with Vietnam. Now what purpose would it serve for a person or a number of persons to take placards and walk up and down, if they don't get their message out?

Demonstrators always made a point to notify the media. We had suspicions that there was collusion beyond that point, very strong suspicions in some instances . . . .

Not only did most police officials suggest that the media can stimulate violence, but like the participants interviewed, several of them sensed a tendency on the part of the media to exploit this aspect of the protest. Once

again, the media's focus on violence was attributed to the competitiveness of the profession. Many police officials expressed displeasure at being pawns in this game and felt that they were being manipulated by the media for their own ends.

The print medium, more than anything else, are so dependent on circulation that the purpose of their paper is to attract and sell. My experience with them, and I have had a fair bit of experience, has been that you never can get to the individual who has the responsibility for the item that appeared in the paper. I am talking to you as a reporter – by the time what I have said to you reaches the media or the printed word and is out on the street, it is distorted, taken out of context, it is changed so that the headline will attract.

Spectacular news sells newspapers. Ordinary routine news doesn't. I would assume the more spectacular the article the better – the more forcible it is for the newspaper.

It appeared that that's [violence] what they were there to cover. They didn't miss anything. They had lots of coverage. Many cameras, photographers there. I thought [in the Yorkville case] they were more interested in what might happen in the way of confrontation.

They are inclined at times to exaggerate. In other words, you help an old lady across the street – that's not news, but if you lock somebody up it is. So they dwell on that part of it [violence], and I am inclined to think at times – to glamorize it to the point of exaggerating a situation.

From the perspective of the police, their relationship with the media is at best awkward and difficult. The police resent what they consider to be press interference in the performance of their duties. They also seem concerned about the media's tendency to exploit a confrontation for their own advantage, rather than give the public a reasoned and objective account. Above all, however, a great deal of resentment appears to be based on the fact that the public's perception of the police can be determined by a source that is not necessarily free of bias.

The media should respect the police and let them do their job before the reporter does his. Reporters should not get in the way.

I am not adverse to an investigating or inquiring press, but I am adverse to one that will manipulate for its own designs and will not give the facts or give you the opportunity. We have no opportunity to tell the true story because we have to use their vehicle.

You are [a policeman] not writing the scenario. You had nothing to do with the script, yet you have to direct it. Try it some time. It's a fine line between a hero and a bum in these situations. If things go right, you come out as a hero, but let one thing go wrong – that the price of glory isn't it?

The Media

Ten interviews were conducted with representatives of the media. These included six newspaper reporters, one television reporter, two newspaper photographers, and a film director with the National Film Board. These interviews focused on such diverse concerns as newsmen's perceptions of consumer preferences for violence, and

the guidelines and problems relating to the conduct of media personnel at the scene of a disturbance. Particular attention was devoted to exploring the journalist's view of press-police relations and the "violence versus issue" controversy.

One of the fundamental controversies underlying the question of violence in the media relates to the quandary over whether the consumer is presented with violence because he has an appetite for it, or whether the individual consumer has little interest in news alternatives and accepts what he is offered. If the newsmen interviewed here are representative of the journalistic profession as a whole, it would appear that the reader is given violence because that's what journalists think he desires and demands.

I suppose to a certain type of reader stories of violence do have a certain excitement for them, perhaps not so much for the responsible reader. But keep in mind that the average newspaper reader, if there is such a thing, and always keeping in mind that this is very general, the average newspaper reader in the country has a Grade Eight education. That's why newspaper language is always written simply – it's written so that a person with a Grade Eight education can understand it. I think the reader gets a better kick out of it. I don't know why. I am not saying that you should gear your story to satisfy a reader. You do your story hopefully with a view that is going to be relatively accurate, but I think the reader gets a better kick out of that kind of thing.

I would like to see less of it, but that's what people want.

It's hard to come up with a general answer for that, but if there were a general black-and-white answer I am afraid it would have to be yes. . . . There does seem to be a strong appetite in a minority of the public I would guess.

In a different vein, we have already noted that there is also a great deal of controversy related to the perceived tendency of the media to stimulate or exacerbate conflict situations. Covering a riot, or any type of civil disturbance, is at best a hazardous endeavour. Nevertheless, despite these considerations few media agencies were found to have guidelines for reporters and photographers covering such incidents. Of the five news agencies contacted (*The Globe and Mail, The Toronto Star, The Ottawa Citizen,* Canadian Press, and the Canadian Broadcasting Corporation), only the CBC was found to have guidelines for personnel involved in reporting such incidents. The CBC guidelines, however, were both very general and very informal, suggesting only that:

the intrusion of cameras into a scene of riot or civil disorder raises complex problems, and places heavy responsibility on the broadcaster. There is every evidence that, in some situations, the presence of television cameras has had a moderating effect on violent incidents. In other cases it is clear that the presence of cameras has been a provocation to violence. Where plans are being made for coverage of events where civil violence may be expected, every precaution should be taken that the presence of CBC reporters and cameras is not used as a "provocation". [9]

Generally, however, the opinion obtained from most of

the reporters interviewed was that their conduct at the scene of a disturbance is a matter of news judgment and common sense, and as such has to be left to the discretion of the individual newsman.

Virtually none, he [a reporter] is his own man. To use the vernacular, he calls it as he sees it. He is the man on the spot and he is responsible to himself. That's chiefly it. . . . A reporter is sent on a job and he does the job with a minimum of instruction. He gets no guidelines from his editor at all.

From my own experience, I don't think there are any general ones established by the media. Editors don't hand out little forms that say should this occur you do this. If you get into a situation where there's a possibility of violence, you've got two things to think of. Firstly, your own skin, and secondly trying to observe what's going on in an objective way. It's pretty difficult. If you're saying, "Is there a criteria that can be applied?", I would say no. No two situations are similar.

There are no formal guidelines at *The Globe and Mail*. It's up to you how far into the crowd you want to get.

Concerning the question of the availability of information at the scene of a disturbance, several of the reporters indicated that the police were usually helpful with respect to crowd estimates and other such basic information. However, they indicated that in most cases such cooperation is contingent upon the pressure police are under and the restrictions imposed by the Police Act. [10]

It's very difficult to estimate the number in a crowd, so what we do is talk to the most senior officer on the scene and ask him for his estimate of the crowd and whatever he says we would attribute this estimate to him. . . . Police information is reasonably accurate, keeping in mind that police want to show themselves in the best light.

In an instance of a demonstration like that, the information that one is looking for is – how many men have they got there, arrests if any, casualties if any. It is generally kind of formal stuff that one would get from them in the general course of events anyway. But if you're thinking of more in terms of background stuff, like the police saying that we knew these people were full of Marxists, and it was going to be a bloody encounter to begin with so that we pulled in the riot squad way ahead – that's not the kind of stuff that you would get normally and you would have to generally depend on someone who had pretty good contacts with the police – someone who worked the police beat.

I always do my own counts, and then I'll look around for a senior police officer, and say what do you think the crowd is. This, of course, becomes part of a time-wasting question as far as they're concerned. If you're into a violent situation, they're up to their ears with their own work. . . . A lot of the difference in police information goes up and down with the individual officers involved. . . . Of course, the Police Act bars policemen from communicating with the press or public without permission of their superior officers.

A number of newsmen, particularly news photographers, did not seem to consider the police to be either helpful or cooperative. Two of the reporters interviewed offered some serious and detailed criticisms from the media perspective about police-press relations.

They wouldn't give you the time of day.

One of the major difficulties is the official obstruction of the press, such as authorities not allowing photographers admittance to a public place, or saying you can't stand there. . . . I don't know of any case where a photographer needs protection from a crowd.

The relations between the press and the Metro police force are very limited, and in some cases it takes up to 24 hours before you even get information about something, and on the spot there's absolutely no information at all. Only certain senior officers are allowed to talk to you and that's from the rank of inspector and up. . . . They withhold the majority of information. That particular night [the Kosygin demonstration], I think the biggest rub against the police was that no one would say exactly what they did, how many did it, and the basis of it. . . . The police in Toronto have specific orders that they are not to talk to the press. They have been told that they can be charged under the Police Act. The only people that can talk to the press are the inspectors of each division during the day and then at night only the duty desk inspector . . . if he's available. On the scene, many police will talk to you because you don't quote them per se as an individual. They'll help you out, but they're awfully careful. The Chief had a senior officers' meeting, up to a year ago when I was closely associated with the police, every month, and he would read items from different newspapers and say how did they get this and how did they get that, and this shouldn't have been given out. . . . The result now is that even good stories about the police aren't coming out.

Very often police have to be the source of official information . There's no alternative there and you have to take their word. . . . Anytime the police have to use force in a situation, then they're not cooperative, especially if you're carrying a camera, they're most uncooperative. They don't want pictures anywhere giving the impression, valid or otherwise, that they may be abusing the general public. . . . When it comes to police and press relations you're never going to change a great deal as long as you have police departments structured the way they are in this country. You take the current Metro police force and their police-press relations – I would say if anything they are minus 2000 and you'll never improve them. . . . The Maloney Report and the Morand Report supposedly dealt with problems concerning the police and what they in effect did was touch two pimples on a body that's covered with pimples. You have people running police departments today whose whole attitude is – secrecy must prevail. And you build up antagonisms with the media as a result of that, and you get the situation where the only kind of press coming out about the police is adverse. Very often it's just a case of damn sheer stupidity on the part of the police administration that they get that kind of publicity and only that kind of publicity. . . . Improve police-press relations? Police are always willing to cooperate with a reporter who allows himself to be co-opted. If he's willing to be co-opted then they'll always cooperate. We have examples of it in this city, and this province. And when I say co-opted, I mean the reporter allows a cop to fix a ticket for him, so the cop is a good guy. Because just as cops work on theory that you get something on the guy you work with and that protects you, they also work on that theory in dealing with the media. And what they've run into in the past five years or so is that they're not getting the kind of guys who are necessarily willing to be co-opted, and so you're creating all kinds of walls.

Most of the newsmen interviewed seemed well aware of the character of their relationship with the protestors, as well as the general relation between protest and the media. Almost all of them acknowledged that demonstrators frequently attempt to manipulate and play to the media and that some of the behaviour of demonstrators is attributable to media presence.

I've paraded with those people on several occasions up there, walking along, talking with them with their picket-signs. They were completely orderly and completely responsible until somebody came along with a TV camera and then somebody handed them matches, they lit torches, they got into the whole bag. It's all part of pseudo-events and they are created a lot – on some occasions completely created by the media who want good pictures for their cameras.

Oh sure they would play to the gallery, very much so, and particularly if there was an empathy, or a sympathy and a rapport between the demonstrators and a specific newsman. . . . I certainly know – but I can't document them – I know of situations where reporters were friendly with people who always seemed to be involved in these demonstrations. Reporters who, for example, would know ahead of time when there was going to be a huge gathering and they would be preconditioned to report this particular happening when it did occur.
I would guess that a majority of demonstrations as such wouldn't happen if the media didn't cover them. A demonstration is designed not just to get the attention of the people on the street, it's to get publicity for some cause. And if the press weren't there, I would say a majority of demonstrations likely wouldn't happen.

It happens all the time. . . . A lot of these things shouldn't be covered at all – they should be ignored! For example, if the press had ignored the Nazi demonstration it would have subsided much more easily.

Demonstrations have become an art. People stage them for press coverage. Professional demonstrators are always trying to get photos in the paper. For example, a man is being led away by the police, he bends his arm back, throws back his head, rolls his eyes with a look of anguish, even though the policeman may be laughing. This happens with perpetual demonstrators – they try to put the media presence to good use.

Oh yes, sure, the Maoists and you name any other groups. Generally, they always make sure that they phone the press. Very few incidents would happen spontaneously without the press being there.

I suppose it's possible that it does have some effect. Look at the number of photographers who get bashed around for taking photographs of people at demonstrations. From that point of view, demonstrators aren't all that keen at having their photographs taken. . . . Large gatherings of people for various reasons create their own individual character. A crowd becomes an individual character with its own identity and its own reality. I suspect that there are a large number of things that go into the creating of a riot . . . and the presence of the media might well be one of those, but I wouldn't have thought that it was a major one. I would have thought the issues, the frustration, the size, the make-up of the crowd, the behaviour of the police, those would have been perhaps larger influences.

It was further suggested, however, that the media are not always an involuntary party in such manipulation.

One of the newsmen interviewed has alleged that the press did not necessarily play the role of impartial observer with respect to the controversy surrounding the Yorkville incident.

This is not the sort of thing that I would stand in the witness box and lay my hand on the Bible or my heart but it was the feeling at the time that a certain CBC crew (or crews) arranged [they really set it up] a situation which they knew damned fine the police couldn't walk away from – like kids lying across the street, for example, in order to get good footage on this. . . . The National Film Board didn't do themselves a lot of good at that time either. The particular situation I just can't remember what it was . . . I think that there was not too much doubt that there was a certain amount of orchestration there.

While most of the reporters recognized the intention of the demonstrators to exploit the presence of the media , there seemed to be considerable disagreement over the extent to which the media should allow themselves to be used in this respect. Several of the newsmen interviewed conceived of demonstrations as an important outlet which should not be denied media coverage. Others , however, appeared to be much more cautious about how much assistance the media should give demonstrators and minority groups in articulating their grievances.

What are the odds that if you cut off the reporting on so-called violence events as we have them here that you aren't in effect going to deny the outlets that these people need for their frustrations and what the hell do you create then. You may create the very thing that does lead to real violence. . . . The media should be an outlet for them. The media should be an outlet for most people in society. It's not . . . a lot of the helpless, those who are looking for solutions to their particular problems don't have a power base to manipulate the media . . . and so it's not accessible to them. Look at the cons . . . they've gotten sophisticated to the point where they can now say we're getting coverage – but what did they have to do to get coverage. They had to go and carry violence to an extreme. . . . But you've got to give every group accessibility. If you don't, they get it anyway by creating these pseudo-demonstrations, these pseudo-violent events.

If we stop covering the demonstrations, do they stop demonstrating or they accelerate to the point that they make a big enough bang that you can't ignore it?

I'm not sure that a newspaper or a radio station or a television station are duty bound to give large amounts of space or time to any group that comes along simply because they say they've got a grievance. The newspapers and the radio and television stations, of course, are partly there for the people they talk about. But their job is far more to provide a service to their customers. These judgments are always difficult to make. When does a disadvantaged group become a legitimate news story? Is it only when it engages in some sort of violence or anti-social activity? I'm not sure that's true.

The minorities of today wouldn't be anywhere unless the media gave them coverage. And I think that has maybe caused some problems today. The majority won't speak up and the minorities speak up and the news media react to it. We give them the coverage. A minority of people is being heard, the majority isn't.

As mentioned in other sections, the "form/content" controversy goes to the very heart of what news is and what the role of the press should be in a democratic society. Unfortunately, there was little agreement among the various media representatives interviewed as to what constitutes news and how much space should be given to a discussion of the issues. There were those who considered violence to be news and the issues to be irrelevant. Others insisted that newspapers should not allow themselves to become propaganda sheets by devoting too much attention to the issues underlying violent conflict. Furthermore, while some reporters felt that violence may be played up at the expense of issues, others suggested that while the coverage does frequently focus on the violence this is perfectly justifiable.

Violence is news. – N.E.W.S. Do I have to spell it for you!

A disturbance in society is obviously a matter of importance because we place a great deal of value on an orderly non-violent society. And so when these things happen, they develop an importance of their own which doesn't have much to do with the validity of the cause being espoused.

If you get into that [issues] and start interviewing every character who has got an axe to grind, you could spend weeks writing articles. There is no question about it. But the point is – what are you really doing? You're just giving outlets to new forms of propaganda.

Yes, there was far too much focus on the violence. You couldn't count them. There weren't that many incidents of violence and the violence was not all that violent in Yorkville. There were beatings. I can't think of one fatality. . . . I don't think there was much discussion of issues; the issues were very clouded at the time. The older reporters perhaps didn't get under the surface. The younger ones – yes, perhaps the younger ones did get under the surface and said, all right there is a demonstration on the street, this is only a symptom. It's a symptom of something else that is much more deeply rooted than appears on the surface. I think they were trying to get under it, but in general no, the issues were not clear.

The issues I think were well known. Basically they were not new issues. In our story there was a big description of the anti-Communist feeling and a small number of interviews that were in the story. I think the emotion that these people felt did come through to an extent. As far as the issue as such, I think it was sort of a basic assumption that people at the time knew that a large number of Eastern European immigrants to Canada were strongly anti-Communist. So there probably wasn't a basic need to go into the whole situation.

Intimately related to this question is the role that follow-up coverage might have in providing a reasoned and informed analysis of a civil disturbance. As noted in Chapter III, 40 per cent of all incidents receive some follow-up coverage, with an average of one article. While it seems that follow-up coverage and backgrounders can be quite helpful in allowing the reader to put an event in perspective, most of the media representatives interviewed felt there was little news interest in such endeavours.

No there isn't follow-up. It's not adequate because there's no news interest in it.

It's a policy to follow-up, but following-up is frequently one of those things most difficult to do in the trade. This paper [*The Globe and Mail*] does it more than most, but you are always caught up with today's news, and following up yesterday's news sometimes takes a back seat.

I believe the *Globe* does this. The more sensational-style newspapers haven't got the room to do it, haven't got the staff to do it, and haven't got the space to do it in the paper.

Conclusion

While we have been unable to determine any direct causal relationship between the media and violence, some of the evidence and testimony presented in this chapter would seem to argue that there is definitely reason for concern. A comparison of news reports of violence in three different newspapers indicated that there is both a wide variation in the coverage of such events and a general tendency to isolate the violence from its context. Most participants viewed public manifestations of discontent as a means of publicizing their grievances with the assistance of the media. The media's penchant, however, for focusing on the violent aspects, at the expense of a consideration of the issues, frequently diminishes the value and credibility of a protest and may even stimulate a cycle of escalation. Furthermore, there seem to be some obvious and fundamental problems in police-press relations, especially with respect to the presence of the media on the scene of a violent confrontation. Understandably, there is a delicate problem involved. Both the media and police have their own set of priorities, and they are frequently at odds with each other. Undeniably the primary function of the police is to maintain public order, while not infringing on the rights of the protestors to present their grievances. The media, on the other hand, also have a responsibility to the public to keep it informed of major occurrences in society. At the same time, these responsibilities are not necessarily mutually exclusive. Beyond certain obvious limitations, neither side has the right to interfere with the other's attempt to carry out its responsibilities. It is obvious, however, from the testimony presented here, that such is not the case. Police-press relations are evidently in need of considerable improvement. While it is not a primary function of the police to act as a source of news, they should recognize their value in this regard by making provisions for the dissemination of accurate and up-to-date information. This need not interfere with the police department's role at the scene of a disturbance. The media, for their part, should recognize the potential volatility of their position at the scene of a confrontation and should conduct themselves in such a manner as to avoid stimulating or aggravating a disturbance. This applies particularly to newspaper photographers and television cameramen who insist in being at the vortex of a demonstration. The inability of the police and media to reach some sort of compromise only serves to unnecessarily complicate the scenario.

Chapter Five

Basic Conclusions and Recommendations

This study has sought to explore the relationships between the media and collective conflict and violence. In the course of the inquiry we have brought to bear a number of the principal investigative techniques of modern social science. Employing a pyramidal research strategy, we began with a general international perspective and culminated with a consideration of the details of seven case studies from the Province of Ontario. At each stage of the pyramid we have presented a number of empirical findings and conclusions. In this final chapter, we summarize some of the more essential conclusions and develop from them a number of policy recommendations.

The research findings reported in the first four chapters have confirmed that:

1. The literature on the behavioural effects of the media is worrying, but not conclusive, about the effects of the media on violence.

2. Examination of the cross-national data on 18 states similar to Canada indicates no consistent relationship between media exposure and levels of collective conflict and violence.

3. While possessing one of the highest levels of media exposure, Canada has one of the lowest levels of collective conflict in the world. When compared with a sample of developed democracies, however, Canada ranks around the median level of collective conflict and violence for such countries.

4. In general, the violence in Canada has been episodic and only a few violence-prone groups have existed over a long period of time.

5. Collective violence in Quebec has been considerably more related to politics than has been the case in Ontario.

6. There were 129 incidents of collective violence involving a minimum of 50 people in the Province of Ontario between 1965 and 1975. There were also nine incidents of individual political violence, mostly bombings of government buildings and foreign embassies.

7. During that period, the press was saturated with this violence.

8. Articles related to political violence formed about eight per cent of the front-page volume of *The Globe and Mail* between 1965 and 1975. When the volume of the violence-related categories of war and defence news and crime news are added, the total volume is approximately 20 per cent.

9. There was no discernible relationship between the magnitude of these incidents and the type of coverage they were accorded in the media.

10. The press in Ontario gave proportionately greater space to social, often insignificant, demonstrations than to economic and drawn-out strife.

11. In terms of both numbers of participants and total volume of initial coverage, incidents over foreign political issues were far more prominent in Ontario than were incidents motivated by economic or domestic political issues.

12. The strong American media penetration of Ontario may be said to have been significant in providing justification for collective conflict and violence in the province.

13. There is a tendency in the media to focus overwhelmingly on violence, while obscuring the issues of confrontation.

14. There are indications that media presence at the scene of a disturbance has on occasion stimulated or exacerbated the confrontation.

15. It is evident that the media on occasion become involved in the creation of news, either by consciously allowing themselves to be manipulated by "dramatic" protestors or by directly orchestrating an event.

16. The nature of police-press relations was found to be in considerable need of improvement, as there proved to be indications of mutual suspicion and hostility which made cooperation between these two parties difficult.

Recommendations
I Over-all

Our over-arching conclusion is that, although there is reason to keep a "watching brief" with regard to the effects of the media on collective conflict and violence, there is absolutely no evidence, and there are plenty of contrary reasons, from the materials examined, for any

form of censorship of media. The goals of the dissatisfied to obtain publicity for their activities, the press to provide adequate coverage, and the police to protect public safety are all aspirations of which Canadians can be proud. However, within the dimensions drawn by these goals there are genuine difficulties on occasion in enabling the public to receive the benefits of all three goals.

II General

1. Ambiguity in research findings is no cause for complacency. An Ontario conference of media and police personnel should be called yearly to discuss the relations between these two bodies.

2. On a voluntary basis this conference should discuss guidelines for activities during and after civil disturbances. In the United States, guidelines already exist at the major television networks and with at least two newspapers (the *Washington Post* and the *San Diego Evening Tribune*). We have found no equivalent guidelines at three of Ontario's major daily newspapers or at this country's major news service. Only the CBC was discovered to have any guidelines, however informal, for personnel covering such events. Some journalists, of course, believe that no guidelines will be helpful. M. S. Hayden, editor of the *Detroit News*, maintains the trouble with formal guidelines is "that they are inevitably based on yesterday's riots".[1] This opinion was echoed by a number of the journalists whose views were reported in the testimony section of Chapter IV. But consideration of such problems could at least rationalize internalized norms about proper behaviour in the collection of news in the course of civil disorders.

3. Canadian social scientists should be encouraged to carry out more research on communications in Canada. Research findings in this field are slim, and the attention given to scientific methodology and rigour is even slimmer. At least some of the research costs should be borne by the media themselves. The American view that: "It is recommended that the burden of research and proof be placed squarely on the mass media, especially commercial television, to carry out meaningful research on the psychological and social effects of mass media portrayals of violence,"[2] seems excessive. However, commercial enterprises and state-run corporations should take an interest in research in this field by contributing to funds established by the Ontario government.

III During Collective Conflict and Violence

1. There is no reason to censure or ban the media, but there are obvious difficulties which could be corrected.

2. The media should be aware of the legal restrictions on demonstrators, rioters, and the police. In this regard, an information package produced by law officers for the media throughout the province should be produced. It should explain such notions as martial law, rules for dispersal of crowds, permits required, et cetera. A similar package has already been developed by the Brantford Police Department for use in that community.

3. Media presence at the scene of a riot or political disturbance should not provoke more violence. The chances of this happening could be diminished by:
– avoiding the blinding of policemen with camera lights, flashguns, or getting equipment in the way of security precautions. In this regard the type of equipment can matter: for example, hand-held silent cameras rather than mobile television units can be used;[3]
– avoiding the dissemination of rumours about collective conflict events;
– avoiding coverage that draws people to the scene of the disturbance at the very time the police are attempting to disperse crowds;
– avoiding coverage that informs the criminal element of society about the tactical deployment of the police;
– providing journalists with easily recognizable credentials and marked cars;
– establishing press pools to cover major demonstrations and visits by foreign dignitaries as a means of reducing the number of unnecessary personnel on the scene;
– preventing journalists from staging events. There is evidence of such activities by newsmen at the Chicago Convention[4] and some contention that this was done by paid employees of the National Film Board at the Yorkville riots in Ontario.

IV Police and Media

1. Many of the logistical and practical difficulties outlined in Chapter IV could be avoided by better media and police cooperation. Of course, if the media or demonstrators engage in unlawful activities they should be arrested, but the essence of the police-media relationship should be one of mutual cooperation. For example:
– There should be discussions between the police and the press about the basic plans and intentions before conflicts begin.
– There could be joint planning sessions each year for regular re-appraisal of methods and future difficulties.
– Under no circumstances should the police confiscate newsmen's materials, notebooks, tapes, or films. In some cases films have actually helped policemen justify their behaviour.[5] No one wants his unlawful behaviour filmed, but he may want his "near to" unlawful behaviour filmed.
– Impersonation of newsmen in crises should be prevented by requiring media officials to wear easily recognizable identification tags.
– When violence erupts, the police should have automatic communications with the mass media. Rumour centres, consisting of a battery of telephones with staff equipped with the latest information, should be set up at times of major social upheaval. The police

should want accurate information given out by the media, especially since information will be conveyed by peer groups anyway.[6]

V Delay of Information

One of the most controversial themes about the relation of the media to collective conflict is their impact on creating new violence through dissemination of correct and timely information. While many agree that there should be no censorship, there is a dispute about *when* information should be given to the public. The question is double-edged. If information about the precise location of a demonstration is given out, then looters and other would-be demonstrators will be drawn to the scene. If not, then some unfortunate individuals may happen into the area because they have not been properly informed. The *Report of the Study Team on Miami Civil Disturbances* told the following story:

[During the early minutes of the riot in Miami], as at all times before and after, the activities of the news media were unrestricted in the area of the disturbance. They used their own discretion in determining where to go and what to do. The fact that the disturbances were taking place promptly on two radio stations serving primarily a black community. One newscaster made a telephone call to one of the stations from the scene, and his report came "live" on the air in the midst of a popular rock-n-roll show. This medium, perhaps more than any other was responsible for quickly spreading the word and attracting more people to the scene with concomitant problems.[7]

In such situations:

– The media could advise the public about the general location of the events, but possibly not provide the precise details for some time.

– How much time? According to the Eisenhower Report, "most of the newsmen with whom we discussed the problem suggest a delay of at least 30 minutes to confirm the story, make certain the facts are clear, and avoid exaggeration."[8] We suggest that the police-media conference discuss this proposal and work out a satisfactory arrangement.

– The media should provide information to the public about how to avoid the area of the problem by suggesting alternative routes.

VI The Media

In carrying out their duty to accurately report the news, the press should take some responsibility for not increasing violence.

1. The news should provide perspective, but not be overly emotional. This means that the press should concentrate on the issues in the confrontation as well as merely describing the volatile or violent incidents.

2. Reportage of violence should not be assumed to be harmful. It can be beneficial. The problem is to provide a balanced coverage. Nevertheless, journalists should refrain from overstating the degree of conflict.

3. The media have a responsibility not only to indicate the truth about events, but also to be comprehensive in their reports. That is, the message sent should not only be accurate in itself, but also should not lack or omit important details. While the basic requirements for good reporting should normally suffice, it may be necessary to set guidelines for rapidly escalating violence.

4. Balanced assessments require more than mere reporting of an event. Both the film and print media have difficulties defining a complete story. The most obvious difficulty is in television. As Walter Scott, NBC Board Chairman, has said: "Because television is a visual medium, it may scan the background and significance of events to focus on the outward appearances – the comings and goings of statesmen instead of the issue that confronts them."[9] The same charge may be made about the press. It should provide background on social issues rather than merely skimming the surface.[10] Lange, Baker, and Ball listed the requirements of balanced coverage as:

(a) What was the purpose of the demonstration? What is the nature of the grievance? Why are the demonstrators there?

(b) The events leading up to the demonstration. Have other remedies been sought such as administrative relief or negotiations either on the grievances or the right to demonstrate? If so, what has been the response of the objects (city officials) of the demonstrations?

(c) The demonstration. How many people were present? How did they control themselves? Do not focus only on the most extreme conduct or dress.

(d) What provocations, if any, were directed toward the police? Did the police use more force than was necessary to maintain order? Were there any extenuating circumstances, such as physical exhaustion or security needs?[11]

5. Inflammatory language about groups – racial, religious, et cetera – should be avoided.

6. The most experienced journalists should be used to cover disturbances.

Endnotes

Chapter One

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2 Walter Lippmann, *Public Opinion* (New York: Macmillan, 1954), p. 3.

3 Canada, Parliament (Senate), *Report of the Special Committee on Mass Media*, vol. III (Ottawa: Information Canada, 1971), p. 5.

4 T. Joseph Scanlon, "The Not So Mass Media: The Role of Individuals in Mass Communication", in *Journalism, Communication and the Law*, ed. G. Stuart Adam (Scarborough, Ontario: Prentice-Hall, 1976), p. 106.

5 Dennis P. Forcese et al., "The Methodology of a Crisis Survey" (Paper presented to annual meeting of Canadian Anthropology-Sociology Association, St. John's, Nfld., June 1971), p. 4.

6 T. Joseph Scanlon, "News Flow about Release of Kidnapped Diplomat Researched by J-students", *Journalism Educator*, 26 (Spring 1971), pp. 35-38.

7 V. O. Key, Jr., *Public Opinion and American Democracy* (New York: Knopf, 1961); Robert E. Lane, *Political Life* (Glencoe, Illinois: *Free Press*, 1959).

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9 This seems to be the charge of Thelma McCormack in "LaMarsh's Law and Order", *Canadian Forum*, August 1976, pp. 23-28.

10 United States Surgeon General's Scientific Advisory Committee on Television and Social Behavior, *Television and Social Behavior: Technical Reports to the Committee*, 5 vols. (Washington, D.C.: U.S. Government Printing Office, 1972). (In subsequent references, this work will be referred to as *Television and Social Behavior*.)

11 The basic, but by no means exhaustive, list of research can be found in *Television and Social Behavior*; the 13 volumes of reports from the United States National Commission on the Causes and Prevention of Violence, especially D. L. Lange, R. K. Baker, and S. J. Ball, *Mass Media and Violence: A Staff Report to the National Commission on the Causes and Prevention of Violence*, vol. 9 (Washington, D.C.: U.S. Government Printing Office, 1969); U.S. National Advisory Commission on Civil Disorders, *Report* (Washington, D.C.: U.S. Government Printing Office, 1968); Otto Larsen, ed., *Violence and the Mass Media* (New York: Harper and Row, 1968); Charles U. Daly, ed., *The Media and the Cities* (Chicago: University of Chicago Press, 1968).

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13 Communiqué from The Royal Commission on Violence in the Communications Industry.

14 H. L. Nieburg, *Political Violence: The Behavioral Process* (New York: St. Martin's Press, 1968), p. 5.

15 See the discussion of political crime in Stephen Schafer, *The Political Criminal* (New York: The Free Press, 1974).

16 Nieburg, op. cit., p. 13.

17 That is to say, more experimental studies have reported statistically significant increases of aggression after the witnessing of aggression than have reported the opposite. See, for example, Walter Weiss, "Effects of the Mass Media of Communication", in *Handbook of Social Psychology*, rev. ed., ed. Gardner Lindzey and Elliott Aronson (Reading, Mass.: Addison-Wesley, 1969), vol. 5, pp. 77-195; and the 60 reports of the Surgeon General's Scientific Advisory Committee summarized in *Television and Social Behavior*.

18 Ontario Psychological Association, "Brief Presented to the Royal Commission on Violence in the Communications Industry", *The Ontario Psychologist* 8 (August 1976), pp. 61-68.

19 Albert Bandura and Richard H. Walters, *Social Learning and Personality Development* (New York: Holt, Rinehart and Winston, 1963).

20 Leonard Berkowitz, "The Effects of Observing Violence", *Scientific American*, 210 (February 1964), pp. 35-41. The exact finding was that "viewing justified aggression increases aggressive tendencies among persons recently frustrated", in Leonard Berkowitz and E. Rawlings, "Effects of Film Violence on Inhibitions against Subsequent Aggression", *Journal of Abnormal and Social Psychology* 66 (1963), pp. 405-12.

21 Fredric Wertham, "School for Violence", *The New York Times*, July 5, 1964.

22 Seymour Feshbach, "The Stimulating versus Cathartic Effects of a Vicarious Aggressive Activity", *Journal of Abnormal and Social Psychology* 63 (1961), pp. 381-385.

23 Robert M. Liebert, "Television and Social Learning: Some Relationships between Viewing Violence and Behaving Aggressively", in *Television and Social Behavior*, vol. 2, pp. 1-42.

24 Klapper, op. cit.

25 Weiss, loc. cit., pp. 77-195.

26 Anthony G. Greenwald, "Do Crime and Violence in the Mass News Media Modify Behavior?" (unpublished paper, 1971).

27 Jack Lyle, "Television in Daily Life: Patterns of Use (Overview)", in *Television and Social Behavior*, vol. 4, p. 24.

28 Albert Bandura, "Influences of Models' Reinforcement Contingencies on the Acquisition of Imitative Responses", *Journal of Personality and Social Psychology* 1 (1965), pp. 589-95. In another study of the effects of viewing controlled violence in television programs versus viewing blander programs the result was that no effects could be found. Seymour Feshbach and Robert D. Singer, *Television and Aggression: An Experimental Field Study* (San Francisco: Jossey-Bass, 1971).

29 J. R. Dominick, "Crime and Law Enforcement on Prime Time Television", *The Public Opinion Quarterly* 57 (1973), p. 245. See also J. R. Dominick and B. S. Greenberg, "Attitudes Towards Violence: The Interaction of Television Exposure, Family Attitudes and Social Class", in *Television and Social Behavior*, vol. 3, pp. 314-46.

30 Greenwald, op. cit., p. 5.

31 Ibid., p. 16.

32 Colin Seymour-Ure, *The Political Impact of the Mass Media* (London: Constable, 1974), p. 45.

33 For theoretical discussion of this point, see Paul F. Lazarsfeld, Bernard Berelson, and Hazel Gaudet, *The People's Choice* (New York: Columbia University Press, 1948); Elihu Katz,

"The Two-Step Flow of Communication: an Up-to-Date Report on an Hypothesis", *Public Opinion Quarterly* 21 (Spring 1957), pp. 61-78; Joseph T. Klapper, op. cit.

34 Elihu Katz and Paul Lazarsfeld, *Personal Influence* (New York: Macmillan, 1964); and Lazarsfeld, Berelson, and Gaudet, op. cit.

35 Scanlon, "The Not So Mass Media", loc. cit., p. 110.

36 Bradley S. Greenberg and Edwin B. Parker, eds., *The Kennedy Assassination and the American Public* (Stanford: Stanford University Press, 1965), p. 182.

37 Lange, Baker, and Ball, op. cit., p. 338.

38 Ben H. Bagdikian, *The Information Machines* (New York: Harper and Row, 1971), p. 138.

39 C. McNaught, *Canada Gets the News* (Toronto: Ryerson Press, 1940); Arnold Edinborough, "The Press", in *Mass Media in Canada*, ed. John A. Irving (Toronto: Ryerson Press, 1962); and Arthur Siegal, "Canadian Newspaper Coverage of the FLQ Crisis: A Study of the Impact of the Press on Politics" (unpublished Ph.D. dissertation, McGill University, Department of Political Science, 1974), p. 6.

40 Lange, Baker, and Ball, op. cit., p. 499.

41 Ibid., p. 501.

42 George A. Comstock, "New Research on Media Content and Control (Overview)", in *Television and Social Behavior*, vol. 1, p. 16.

43 David G. Clark and William R. Blankenburg, "Trends in Violent Content in Selected Mass Media", in *Television and Social Behavior*, vol. 1, p. 229.

44 P. J. Deutschmann, *News-Page Content of Twelve Metropolitan Dailies* (Cincinnati: Scripps-Howard Research, 1959).

45 S. G. Levy, "A 150 Year Study of Political Violence in the United States", in *Violence in America: Historical and Comparative Perspectives*, A Report Submitted to the National Commission on the Causes and Prevention of Violence, ed. H. G. Graham and T. R. Gurr (New York: Bantam Books, 1969), pp. 84-100.

46 See Leonard Berkowitz and Jacqueline Macaulay, " The Contagion of Criminal Violence", *Sociometry* 34 (1971), pp. 238-260; Richard P. Y. Li and William R. Thompson, "The Coup Contagion Hypothesis", *Journal of Conflict Resolution* 19 (March 1975), pp. 63-88; Paul Ritterband and Richard Silberstein, "Group Disorders in the Public Schools", *American Sociological Review* 38 (August 1973), pp. 461-76; and S. Spilerman, "The Causes of Racial Disturbances: A Comparison of Alternative Explanations", *American Sociological Review* 35 (August 1970), pp. 627-49.

47 Nieburg, op. cit., p. 30.

48 Desmond Ellis, "Violence and the Mass Media", *Proceedings of Workshop on Violence in Canadian Society* (Toronto: Centre of Criminology, University of Toronto, September 8-9, 1975), p. 92.

49 Clark and Blakenburg, loc. cit., p. 189.

50 See Marvin Wolfgang, *Patterns in Criminal Homicide* (Philadelphia: University of Pennsylvania Press, 1948), which also showed that 94 per cent of homicides occur within racial groups and in only 12 per cent of homicides were the assailant and the victim strangers.

51 Lange, Baker, and Ball, op. cit., p. 363.

52 Ibid., p. 367.

53 W. Schramm, J. Lyle, and E. Parker, *Television in the Lives of Our Children* (Stanford: Stanford University Press, 1961).

54 M. M. Lefkowitz, L. D. Eron, L. O. Walder, and L. R. Huesmann, "Television Violence and Child Aggression: A Followup Study", in *Television and Social Behavior*, vol. 3, pp. 35-136.

55 Jack M. McLeod, Charles K. Atkin, and Steven H. Chaffee, "Adolescents, Parents, and Television Use: Self-Report and Other-Report Measures from the Wisconsin Sample", in *Television and Social Behavior*, vol. 3, pp. 239-314.

56 R. Liebert, J. M. Neale, and E. S. Davidson, *The Early Window: Effects of Television on Children and Youth* (Toronto: Pergamon Press, 1973).

57 Ellis, loc. cit., pp. 95-99.

58 The validity of surveys is difficult to assess as functional variables are difficult to control. Twenty per cent of Negro males in the United States declared themselves ready and willing to participate in riots as an act of protest, but only 3 per cent actually had. See Lange, Baker, and Ball, op. cit., p. 487. Moreover, the results of future experimental studies conducted in naturalistic settings may prove more helpful in establishing cause-and-effect relations. See F. B. Steuer, N. N. Applefield, and R. Smith, "Televised Aggression and the Later Personal Aggression of Pre-School Children", *Journal of Experimental Psychology* 11 (1971), pp. 442-47.

59 Lange, Baker, and Ball, op. cit., p. 361.

60 Sophy Burnham, "Telling It Like It Isn't", *New York Times Magazine,* Sept. 16, 1968, p. 13, quoted in Lange, Baker, and Ball, op. cit., p. 89.

61 Ibid.

62 Lange, Baker, and Ball, op. cit., p. 93.

63 Ibid., pp. 93-94.

64 Ibid., p. 103.

65 Cited in H. D. Graham and T. R. Gurr, eds., op. cit., p. 440.

66 J. D. Halloran, *The Effects of Mass Communication* (Leicester: University of Leicester Press, 1965), p. 29.

67 Lange, Baker, and Ball, op. cit., p. 217.

Chapter Two

1 The various Commissions have been cited in Chapter I. Two of the most recent and most sophisticated attempts at causal modelling are Ted Robert Gurr and Raymond Duvall "Civil Conflict in the 1960's: A Reciprocal Theoretical System with Parameter Estimates", *Comparative Political Studies* 6 (July 1973), pp. 135-69; and Douglas A. Hibbs, *Mass Political Violence: A Cross National Causal Analysis* (New York: John Wiley and Sons, 1973).

2 Relative deprivation theory postulates an essentially linear relationship between socio-economic conditions and social violence. The directness of this association is contingent upon what psychologists have termed "the frustration aggression mechanism". This mechanism, actually a psycho-biological reflex, is viewed as the primary source of the human capacity for violence. According to relative deprivation theory, frustration is produced by the perception of a discrepancy between men's value expectations and their value capabilities, that is, between the conditions of life to which people believe themselves justifiably entitled and those which they are capable of attaining or maintaining given the social means

available to them. The optimum environment for the outbreak of civil unrest is, thus, presumed to be a scenario where expectations based on economic status and capabilities tied to economic conditions diverge. For a further explanation of the theoretical foundation of the relative deprivation hypothesis, see James Chowning Davies, "The J-Curve of Rising and Declining Satisfactions as a cause of Some Great Revolutions and a Contained Rebellion", in *Violence in America: Historical and Comparative Perspectives,* A Report submitted to the National Commission on the Causes and Prevention of Violence, ed. H. D. Graham and T. R. Gurr (New York: Bantam Books, 1969), pp. 690-730; Ivo K. Feierabend et al., "Social Change and Political Violence: Cross National Patterns", in Graham and Gurr, eds., op. cit.; Ted Robert Gurr, *Why Men Rebel* (Princeton, New Jersey: Princeton University Press, 1970); and Walter Korpi, "Conflict Power and Relative Deprivation", *American Political Science Review,* 68 (December 1974), pp. 1569-1578.

3 See Karl Deutsch, *Nationalism and Social Communication: An Inquiry Into the Foundations of Nationality* (Cambridge, Massachusetts: MIT Press, 1966); Cynthia H. Enloe, *Ethnic Conflict and Political Development* (Boston: Little, Brown, 1973); Clifford Geertz, "The Integrative Revolution: Primordial Sentiments and Civil Politics in the New States", in *Political Modernization,* ed. C. Welch (Belmont, California: Wadsworth, 1967), pp. 167-87; Ted Robert Gurr, op. cit.; Douglas Hibbs, op. cit., pp. 65-81; and William Kornhauser, "Rebellion and Political Development," in *Internal War,* ed. Harry Eckstein (New York: The Free Press, 1964), pp. 142-56.

4 For example, see Hayward R. Alker, Jr., and Bruce M. Russett, "Multifactor Explanations of Social Change", in *World Handbook of Political and Social Indicators,* ed. Russett et al. (New Haven: Yale University Press, 1964), p. 321; Ivo K. Feierabend et al., loc. cit.; William H. Flanigan and Edwin Fogelman, "Patterns of Political Violence in Comparative Historical Perspective", *Comparative Politics* 3 (October 1970), pp. 1-20; and Raymond Tanter and Manus Midlarsky, "A Theory of Revolution", *Journal of Conflict Resolution* 11 (September 1967) pp.264-80. See also the discussion in Douglas A. Hibbs, op. cit., pp. 21-42.

5 See Hibbs, op. cit., pp. 81-112.

6 Quantitative evidence of the importance of these factors can be found in Edward D. Mitchell, "Inequality and Insurgency: A Statistical Study of South Vietnam", *World Politics* 20 (April 1968), pp. 421-38; Anthony J. Russo, Jr., "Economic and Social Correlates of Government Control in South Vietnam", in *Anger, Violence and Politics,* ed. Ivo K. Feierabend et al. (Englewood Cliffs, New Jersey: Prentice-Hall, 1972), pp. 314-24; and R. Tanter and M. Midlarsky, loc. cit. A qualitative discussion of the relationship of such inequities to civil unrest can be found in Charles Tilly, *The Vendee* (Cambridge, Massachusetts: MIT Press, 1964), and Barrington Moore, Jr., *Social Origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World* (Boston: Beacon Press, 1966).

7 See Susan Welch and Alan Booth, "Crowding and Civil Disorder: An Examination of Comparative National and City Data", *Comparative Political Studies* 8 (April 1975), pp. 58-74; and George M. Carstairs, "Overcrowding and Human Aggression", in Graham and Gurr, eds., op cit., pp. 751-64.

8 For example, the test model employed by Hibbs in his study *Mass Political Violence* initially contained 15 variables. The model was subsequently revised to include eight variables

including Government Security Sanctions; Annual Average Change in Energy Consumption per capita, 1955-1965; Group Discrimination; Communist Party Membership; Total Population; and a Communist Regime Dummy variable. For an explanation of this model and these variables see Douglas Hibbs, op. cit. For another example of causal modelling and the use of parameter estimation techniques, see Gurr and Duvall, loc. cit.

9 Desmond Ellis carried out a rough and ready check to determine if the number of television sets and the amount of violence correlated in a cross-national setting. Using Interpol's Crime Statistics for 1965 and 1966 and the number of television sets from World Radio and Television Handbook for 1966, he found no relation. See Desmond Ellis, "Violence and the Mass Media", *Proceedings of Workshop on Violence in Canadian Society* (Toronto: Centre of Criminology, University of Toronto, September 8-9, 1975), p. 93.

10 In a previous analysis, the effect of aggression-evoking cues, such as the sight or news of violence, was discussed. However, it was felt that such "cues" were more likely to affect the form and timing rather than the occurrence of civil unrest. Moreover, this analysis did not employ any media variables. See Tedd Gurr and Charles Ruttenberg, *The Conditions of Civil Violence: First Test of a Causal Model* (Princeton, New Jersey: Center of International Studies, 1967).

11 See Andrew J. Sofranko and Robert C. Bealer, *Unbalanced Modernization and Domestic Instability: A Comparative Analysis* (London: Sage Publications, 1972).

12 The data utilized in this analysis were made available by the Inter-University Consortium for Political Research. The data were originally collected by Charles Taylor and Michael Hudson. Neither the original source or collectors of the data nor the consortium bear any responsibility for the analysis or interpretations presented here.

13 A daily newspaper has been defined in the data set as a publication containing general news and appearing at least four times a week. In different countries the size of a daily newspaper may range from a single sheet to 50 or more pages. No adjustment for copies sold outside the country has been made, as it was believed this would not affect the results significantly.

14 The figures for radios relate to all types of receivers including those connected to a redistribution system. They relate either to the number of licences issued on sets declared, or to the estimated number of receivers in use. In many countries a licence may cover more than one receiver in the same household.

15 The data for televisions relate to the number of licences issued, or in a few cases to the estimated number of receivers in use.

16 These figures are based on annual attendance by paid admission to film performances whether of 35 mm or 16 mm and whether or not in permanent establishments possessing fixed equipment.

17 See Chapter I; also Sofranko and Bealer, op. cit., p. 34, and Donald I. Warren, "Mass Media and Racial Crisis: A study of the New Bethel Church Incident in Detroit", *Journal of Social Issues* 28 (1972), pp. 111-31.

18 As it is not the intention of this analysis to generalize beyond this population, the question of sampling bias would seem somewhat irrelevant. It is actually impossible to make any

generalizations beyond the particular sample chosen here, as the concept "media" is salient to a very restricted number of countries.

19 The concept "economic development" was operationalized here by using the level of energy consumption per capita (1960), which has also been derived from the Taylor and Hudson data.

20 For those unfamiliar with correlational analysis, a product moment correlation coefficient is a measure of the strength of the relationship between two variables. The coefficients associated with a perfect linear relationship would be 1.00 or −1.00. The coefficient indicating no relationship between the two variables would be 0.

21 For a fuller description of this index, see Ralph Lowenstein, *Press Independence and Critical Ability Index: Measuring World Press Freedom* (Columbia: University of Missouri School of Journalism Freedom of Information Centre, 1966).

22 According to the Taylor and Hudson Data, Canada ranked fifth in the world in terms of press freedom, preceded only by Switzerland, Norway, the Netherlands, and Sweden. The United States was tied for seventh place with Finland. This same data source ranked Canada fourth in the world in terms of "mass media penetration" behind the United States, Sweden, and the United Kingdom. See Charles L. Taylor and Michael Hudson, eds., *World Handbook of Political and Social Indicators,* 2nd ed. (New Haven: Yale University Press, 1972).

23 Hibbs, op. cit., p. 149.

24 These 19 states are undoubtedly not the most violent countries in the world, as most of the theoretical and empirical literature has shown that both the level of economic development and the level of democratization are inversely correlated with civil unrest. For example, see Stephen R. Graubard, ed., *A New Europe ?* (Boston: Houghton Mifflin, 1964); and Clark Kerr et al., *Industrialism and Industrial Man* (Cambridge, Massachusetts: Harvard University Press, 1960). See also Fred R. von der Menden, *Comparative Political Violence* (Englewood Cliffs, New Jersey: Prentice-Hall, 1974); and Ronald Manzer, *Canada: A Socio-Political Report* (Toronto: McGraw-Hill Ryerson, 1974), pp. 79-84. Despite the fact that the countries selected here have relatively lower levels of violence compared to other samples of nations, there is still enough variation among the countries in this sample (range 2230 and standard deviation 685.36) to make a viable analysis.

25 For a discussion of some of the semantic and conceptual problems entailed by the use of the term violence see Chapter I, and Terry Nardin, "Conflicting Conceptions of Political Violence", *Political Science Annual: An International Review,* vol. 4, ed. C. P. Cotter (Indianapolis, Indiana: Bobbs-Merrill, 1973), pp. 104-25.

26 The Conflict data was derived from the Taylor and Hudson Annual Events Data, which is one of the component data sets in the *World Handbook.* This set is considered to be the most comprehensive aggregate data files now in existence. See Hibbs, op. cit., p. 5.

27 The variable assassinations was dropped from this analysis due to the fact that 15 of the 19 countries in this sample had no observations for this indicator. Its inclusion would have only added "noise" to the system, as computer specialists put it. Also excluded, for theoretical reasons, were elite actions of various kinds, such as military coups and government repression, which have often been included in analyses of

domestic unrest. However, deaths that occurred as a result of clashes between elites and masses in insurgent protest situations were not excluded.

The description of each event variable that follows, with the exception of the pro-government demonstration variable, has been taken from Hibbs, who in turn paraphrased them from "Political Indicators Definitions" (no author listed), from the Center for Research on Conflict Resolution, University of Michigan, November 21, 1966. See Hibbs, op. cit., pp. 8-9. A detailed description of a slightly revised version of the data can be found in Charles L. Taylor and Michael C. Hudson, op. cit.

28 The Taylor and Hudson Annual Events Data include the years 1948-67. The period 1955-65 was selected on the basis of the availability of media data.

29 See Raymond Tanter, "Dimensions of Conflict Behavior Within and Between Nations", *Journal of Conflict Resolution* 10 (March 1966), pp. 41-64.

30 G. Donald Morrison and Hugh Michael Stevenson, "Political Instability in Independent Black Africa: More Dimensions of Conflict Behavior Within Nations", *Journal of Conflict Resolution* 15 (September 1971), p. 355.

31 Hibbs, op. cit., p. 9.

32 One of the major characteristics of factor analysis is its data reduction capability. Given a series of correlation coefficients for a set of variables, factor analytic techniques can be used to determine whether some underlying pattern of relationship exists in the data to the extent that these variables may be reduced to a smaller set of factors or components. These components may then be used as source variables accounting for the intercorrelations in the data. For a discussion of factor analyses and some of the various data reduction techniques see Harry H. Harmon, *Modern Factor Analysis* (Chicago: University of Chicago Press, 1967); and Rudolph J. Rummel, "Understanding Factor Analysis", *Journal of Conflict Resolution* 11 (1967), pp. 444-86. See also Morrison and Stevenson, loc. cit., p. 354.

33 Morrison and Stevenson, loc. cit., p. 348.

34 This transformation employed a natural log.

35 For a discussion of the use of logarithms in this type of analysis see Forman S. Acton, *Analysis of Straight Line Data* (New York: John Wiley and Sons, 1959); and Edward R. Tufte, *Data Analysis for Politics and Policy* (Englewood Cliffs, New Jersey: Prentice-Hall, 1974).

36 See Carl-Gunnar Janson, "Some Problems of Ecological Factor Analysis", in Mattei Dogan and Stein Rokkan, eds., *Quantitative Ecological Analysis in the Social Sciences* (Cambridge, Massachusetts: MIT Press, 1969), pp. 301-42; and N.H. Chi, *Scientific Explanations and the Logic of Data Analysis in Social Research* (forthcoming).

37 Tanter, loc. cit.

38 The use of a logarithm for this index fulfils some of the basic technical requirements of regression analysis in that it normalizes the distribution. Symmetrical distributions, especially those that resemble normal distributions, fulfil statistical assumptions that form the basis of statistical significance testing in the regression model. See Tufts, op. cit.

39 See Charles L. Taylor and Michael C. Hudson, eds., op. cit., pp. 208-09.

40 See especially Alberta E. Siegel, "Violence in the Mass Media", in *Violence and the Struggle for Existence*, ed. David N. Daniels, Marshall F. Gilula, and Frank M. Ochberg (Boston: Little, Brown, 1970), pp. 193-240.

41 Multiple regression analysis allows for the study of the linear relationships between a set of independent variables and a number of dependent variables, while taking into account the interrelationships among the independent variables. For example, whenever multiple correlation is used for more than three variables, we can correlate a partial correlation coefficient for each independent variable (in this case each media variable); these partial correlation coefficients represent the variation explained by that particular measure when all of the other variables are held constant. A multiple regression equation shows the analogous weight for each partial correlation coefficient in a multiple correlation analysis. The regression formula $y = a + b_x$ allows for one constant a for the equation and a b weight, or partial coefficient for each independent variable. The derivations from universality are handled in a regression equation by the error term which can be conceived as a residual component produced by all factors not explicitly considered in the equation. For a fuller description of this statistical technique see Hubert Blalock, *Social Statistics* (New York: McGraw-Hill, 1960), pp. 429-70.

42 Specification error arises due to the omission of a relevant explanatory variable. A major assumption of regression analysis is that no important variables that correlate with both the dependent and independent variables are excluded as such exclusions create biased estimates. It is felt, however, that if the omitted variable is uncorrelated with the excluded explanatory variable, its omission may not lead to serious consequences for least squares estimates. To preclude the possibility of specification error, a number of potentially relevant explanatory variables derived from Hibbs and other sources were correlated with the four media variables. These variables included population density, ethnic differentiation, economic growth rate, income inequity, internal security forces and military manpower per 1,000 working-age population, per cent of legislative seats for Communists and Socialists. None of these demonstrated any significant correlation with any of the media variables, offering some assurance that specifications error is not a serious problem in this study. See Jan Kamenta, *Elements of Econometrics* (New York: Macmillan, 1971), pp. 391-405.

43 A similar series of regression equations were run controlling for economic development, with usually the same results, the only change being the level of R^2. Here newspaper circulation accounted for 15 per cent of the variation in the number of riots, 38 per cent in the number of deaths, 45 per cent in the incidence of armed attacks, 33 per cent in the number of pro-government demonstrations, and 25 per cent in the number of political strikes.

45 It should be noted that certain difficulties are inherent in working with such a small sample. Theoretically, both the size and the homogeneous character of this sample may have some tendency to distort the results and make statistically significant relationships more difficult to obtain. The fact, however, that one variable (that is, newspaper circulation) was found to be consistently significant should in this particular case allay any fears about such problems.

44

Legend	Country	Newspaper Circulation per 1,000 population	Logged Conflict Score
A	Venezuela	96	3.38
B	Italy	101	3.10
C	Austria	208	2.02
D	Canada	222	2.70
E	Ireland	244	1.24
F	France	257	3.34
G	Netherlands	278	.58
H	Belgium	285	2.76
I	West Germany	307	2.62
J	Switzerland	321	.99
K	United States	326	3.44
L	Denmark	353	.99
M	Australia	358	.91
N	Finland	359	1.45
O	Norway	377	.33
P	New Zealand	381	0
Q	Japan	396	2.66
R	Sweden	477	.48
S	United Kingdom	514	2.66

46 J. M. C. Torrance, "Cultural Factors and the Response of Government to Violence" (Ph.D. thesis, York University, 1975).

47 Kenneth McNaught, "Collective Violence in Canadian History: Some Problems of Definition and Research", *Proceedings of Workshop on Violence in Canadian Society* (Toronto: Centre of Criminology, University of Toronto, September 8-9, 1975), pp. 165-76.

48 Comment about Joseph Howe by Chester Morten, as quoted in Kenneth McNaught, "Violence in Canadian History", in *Character and Circumstance: Essays in Honour of Donald G. Creighton*, ed. John S. Moir (Toronto: Macmillan, 1970), p. 4.

49 Ibid., p. 75.

50 Stuart Jamieson, *Times of Troubles, Labour Unrest and Industrial Conflict in Canada 1900-1966* (Ottawa: Task Force on Labour Relations, 1968), p. 8.

51 For an interesting look at some of these confrontations see William Perkins Bull, *From the Boyne to Brampton*, (Toronto: George McLeod, 1930); and J. K. Johnson, "Colonel James Fitzgibbon and the Suppression of Irish Riots in Upper Canada", *Ontario History* 58 (September 1966), pp. 139-55.

52 See Kenneth McNaught, *Pelican History of Canada* (Harmondsworth, England: Penguin, 1969); and Hartwell Bowsfield, ed., *Louis Riel: Rebel of the Western Frontier or Victim of Politics and Prejudice?* (Toronto: Copp Clark, 1969).

53 See Michael S. Cross, "The Lumber Community of Upper Canada, 1815-1867", *Ontario History* 63 (September 1971), pp. 177-90; and Michael S. Cross, "The Shiners' War: Social Violence in the Ottawa Valley in the 1830's", *Canadian Historical Review* 54 (March 1973), pp. 1-26.

54 William Rutledge, quoted in W. Bull, op. cit., p. 263.

55 In the North Hastings by-election of 1856 in Ontario, the election expenses of one candidate were said to have included 6000 no. 1 hickory axe handles and 60 gallons of good Canadian whiskey. The whiskey, needless to say, was for his supporters. Ibid., p. 168. For examples of some of the election violence which has occurred in Canadian history see Orlo Miller, *The Donnellys Must Die* (Toronto: Macmillan, 1962); E. C. Moulton, "Constitutional Crisis and Civil Strife in Newfoundland, February to November 1861", *Canadian Historical Review* 48 (September 1967), pp. 251-72; and Brian J. Young, "The Defeat of George Etienne Cartier in Montreal East in 1872", *Canadian Historical Review* 51 (December 1970), pp. 386-406.

56 Mason Wade, *The French Canadians 1760-1945* (Toronto: Macmillan, 1949), p. 599.

57 W. Bull, op. cit., p. 270.

58 Robert J. Jackson, "Crisis Management and Policy Making: An Explanation of Theory and Research", in *The Dynamics of Public Policy*, ed. Richard Rose (London: Sage Publications, 1976).

59 Daniel Latouche, "Violence, politique et crise dans la société québécois", in *Essays On the Left: Essays in Honour of T. C. Douglas*, ed. Laurier LaPierre et al. (Toronto: McClelland and Stewart, 1971), p. 181.

60 Canadian labour history is full of incidents of the state being an active party to conflict rather than a neutral arbitrator. The 1930s are a monotonous recital of the use of local police and the RCMP by the state to serve the status quo and the vested interests of employers. This decade in Ontario was marked by the appearance of Hepburn's Hussars, a private regiment mobilized by Mitchell Hepburn, the premier of Ontario, to break the General Motors Strike in Oshawa in 1937. Some 12 years later, Quebec witnessed a more forceful intimidation of labour when Premier Maurice Duplessis used the Quebec Provincial Police as a private Union Nationale army to destroy the strike at Asbestos. See Jamieson, op. cit.; and Desmond Morton, "Aid to the Civil Power, The Canadian Militia in support of Social Order", *Canadian Historical Review* 50 (December 1970), pp. 407-35.

61 McNaught, "Violence in Canadian History", loc. cit., p. 99 .

62 Anthony M. Marcus, "Some Psychiatric and Sociological Aspects of Violence", *International Journal of Group Tensions* 4 (June 1974), p. 254.

63 One of the major problems that one encounters in using most cross-national data on conflict is that they generally under-report intra-societal levels of conflict. This is due to the fact that most data is derived from such sources as the *New York Times Index*, *Keesing's Contemporary Archives*, and *Facts on File* – all of which have a tendency to concentrate only on major conflict events. For example, authoritative sources have listed 380 bombings, burnings, and depredations during the years 1961-62, and 58 incidents of FLQ terrorism. This does not compare favourably with the total above. See George Woodcock, *The Doukhobors* (Toronto: Oxford University Press, 1968), p. 350; and Marc Laurendeau, *Les québécois violents: un ouvrage sur les causes et la rentabilité de la violence d'inspiration politique au Québec* (Montreal: Les Editions du Boréal Express, 1974), pp. 213-22.

64 For an interesting examination of the activities of this group, see Simma Holt, *Terror in the Name of God: The Story of the Sons of Freedom* (Toronto: McClelland and Stewart, 1964);

and George Woodcock, *The Doukhobors* (Toronto: Oxford University Press, 1968).

65 It should be understood that this table represents a very crude comparison. No attempt has been made to weight, or to differentiate between the various component measures of conflict. Thus, anti-government demonstrations, riots, armed attacks, deaths et cetera, are all considered equal. However, it is quite obvious that the countries with the highest collective conflict scores have experienced the most intense forms of conflict. For example, most of the countries ranked in the upper quarter of this table experienced a substantial number of deaths from domestic conflict. Indonesia experienced 83,036 deaths, Hungary 40,009, et cetera. Thus, there is a certain logic to the ranking. A more sophisticated comparison using the same 84 countries and slightly different measures can be found in Table 16.

66 In this study, Gurr defines "civil strife" as all collective, non-governmental attacks on persons or property that occur within the boundaries of an autonomous or colonial political unit. Operationally, he has qualified his definition by the inclusion of symbolic attacks on political persons or policies (for example, political demonstrations) and by the exclusion of turmoil events in which less than 100 persons took part. See Ted Robert Gurr, "A Comparative Study of Civil Strife", in Graham and Gurr, op. cit., pp. 572-634.

67 In this analysis, the concept "violence" has been defined in the broadest sense to include both overt acts of physical force and patterns of denial, or to use Galtung's term "structural violence". The latter is operationalized using measures of militarism, impoverishment, group discrimination, economic exploitation, and dependency. Canada's ranking in this sample is based on its score for both types of violence. See Ted Robert Gurr and Vaughn F. Bishop, "Violent Nations, and Others", *Journal of Conflict Resolution* 20 (March 1976), pp. 79-110.

68 See a complete discussion of this scaling technique in James F. Kirkham et al., *Assassination and Political Violence* , A Report to the National Commission on the Causes and Prevention of Violence (New York: Bantam Books, 1970), pp. 166-69.

69 Ronald Manzer, op. cit., p. 80.

70 Micheal J. Kelly, "Collective Violence in Ontario and Quebec 1968-1973: A Comparative Analysis" (M.A. thesis, University of Ottawa, 1975).

71 M. Laurendeau, op. cit., pp. 213-22.

72 This data was obtained from Department B of the Montreal Police.

73 Joseph A. Frank and Micheal J. Kelly, "Etude preliminaire sur la violence collective en Ontario et au Québec, 1963-1973" (forthcoming).

74 M. Laurendeau, op. cit., pp. 213-22.

75 The figures for Quebec and Ontario do not total 100 per cent. Eight per cent of the violence in Quebec and 19 per cent of the violence in Ontario occurred as a result of random incidents. This catchall category includes such events as brawls, group vandalism, motorcycle gang rampages, et cetera.

76 For a discussion of the relationship between ideology and the intensity of protest, see George Simmel, *The Web of Intergroup Conflict* (Glencoe, Illinois: The Free Press, 1955).

77 The remaining 64 per cent of the collective violence in this

province was occasioned by economic issues and university-related issues. Nineteen per cent was classified as issueless.

78 J. A. Frank and Micheal J. Kelly, loc. cit.

79 The remaining 64 per cent of the violence was once again distributed among economic events, events related to university issues and events that had no discernible motivation, that is, they were issueless.

80 M. Kelly, op. cit., p. 74.

81 The employees of this company had been trying vainly to negotiate the issue of union recognition with the United States-owned firm since the summer of 1964. By 1968, the dispute had taken on political language and anti-United States overtones. See *The Globe and Mail*, February 28, 1968, p. 82. The violence during this strike erupted when 100 strikers and their 2000 sympathizers attempted to set fire to the factory. Terrorist bombs were also planted in near-by mailboxes.

Chapter Three

1 For an excellent discussion of content analysis as a research technique, see Ole R. Holsti, *Content Analysis for the Social Sciences and Humanities* (Reading, Massachusetts: Addison-Wesley, 1969); and Richard W. Budd, Robert K. Thorp, and Lewis Donohew, *Content Analysis of Communication* (New York: Macmillan, 1967).

2 See Charles Tilly, "Collective Violence in European Perspective", in *Violence in America: Historical and Comparative Perspectives*, A Report submitted to the National Commission on the Causes and Prevention of Violence, eds. H. D. Graham and T. R. Gurr (New York: Bantam Books, 1969), p. 45.

3 John C. Merrill, *The Elite Press: Great Newspapers of the World* (New York: Pitman, 1968).

4 John Porter, *The Vertical Mosaic* (Toronto: University of Toronto Press, 1965), p. 486.

5 Merrill, op. cit., pp. 121-24.

6 It should be noted that *The Globe and Mail* publishes several editions of each day's newspaper, depending on whether it's meant for national, provincial, or Metropolitan Toronto circulation. The national edition of *The Globe and Mail* was used for the purposes of this study.

7 The category scheme used in the random sample was adapted from that used in an article by Guido H. Stempel, III, "Content Patterns of Small and Metropolitan Dailies", *Journalism Quarterly* 39 (Winter 1962), pp. 88-90.

8 E. Terrance Jones, *Conducting Political Research* (New York: Harper and Row, 1971), p. 64. For a description of randomization techniques, see H. W. Smith, *Strategies of Social Research: The Methodological Imagination* (Englewood Cliffs, New Jersey: Prentice-Hall, 1975), pp. 118-24.

9 Results from similar American studies measuring volume devoted to "violence" are somewhat contradictory, varying from two per cent to 34 per cent in the 1960s. See Chapter I, Section A. Content Analysis.

10 There is a more complete discussion of the coding scheme used throughout this study, later in this chapter.

11 The precise cut-off point for "collective" varies considerably in the empirical literature. The figure "20" is used by Michael Stohl in "War and Domestic Political Violence: The Case of the United States, 1890-1970", *Journal of Conflict Resolution* 19 (September 1975), p. 387. The number "50" is used by Yoshio Sugimoto in "Surplus Value, Unemployment and Industrial Turbulence: A Statistical Application of the Marxian Model to Post-War Japan", *Journal of Conflict Resolution* 19 (March 1975), p. 28. "50" participants or more is also employed in the work of Charles Tilly, "Collective Violence in European Perspective", in Graham and Gurr, eds. op. cit., p. 45, while Ted R. Gurr utilizes "100" in "A Comparative Study of Civil Strife – Appendix 1, Procedures Used in Collecting and Summarizing Civil Strife Data", in Graham and Gurr, eds., op. cit., p. 626. It would seem that any specification which is defensible is acceptable, as they are all somewhat arbitrary.

12 Micheal J. Kelly, "Collective Violence in Ontario and Quebec, 1968-1973: A Comparative Analysis", (M.A. thesis, University of Ottawa, 1975), p. 22.

13 The Ontario collective violence data for the years 1965-1973 was developed by Joseph A. Frank and Micheal J. Kelly. We wish to express our appreciation to Professor Frank for providing us with his data and codebooks for the period.

14 Ted R. Gurr, "A Causal Model of Civil Strife: A Comparative Analysis Using New Indices", *American Political Science Review* 62 (December 1968), p. 1108.

15 It should be noted that the results were rounded-off for the purpose of convenience, and that participant figures from incidents that did not clearly fit the category scheme were excluded.

16 The highly controversial nature of the Vietnam War may have strongly contributed to this imbalance. There does not exist, however, any substantial data on other periods of Canadian history with which to verify this finding. Further research studies examining the salience of foreign political issues in prompting violence in Canada are needed.

17 The term "man days" refers to an aggregate measure of the number of participants in each event times the duration of each event.

18 It should be noted that the results were rounded-off for the purpose of convenience, and that figures from incidents motivated by a combination of issues were not included.

19 Richard W. Budd, "Attention Score: A Device for Measuring News 'Play' ", *Journalism Quarterly* 41 (Spring 1964), pp. 259-62.

20 The peculiar placement of article headings and photographs on the newspage can suggest some misleading implications. The front page of *The Globe and Mail* for September 10, 1973, features a headline stating "Dissident Railroaders Charged". Directly below this headline is a photograph of a spectacular blaze at the Canadian National Railway freight shed in Toronto. While the dateline of the railroad story is Vancouver and deals with the violation of an injunction order, an entirely misleading interpretation is possible if one assumes the headline and photograph refer to the same story. The casual reader of the newspaper would be left with the clear impression that the railway workers were responsible for arson in Toronto.

Chapter Four

1 An effort was made to contact a major figure in each category for each of the seven incidents. As many of these events had taken place at least five years ago, an extensive telephone search was required.

2 The three questionnaires are included in Appendix F. It should be noted, however, that in the course of the various interviews a number of supplementary or follow-up questions were also posed. All interviews conducted in person were tape-recorded and form part of the general body of research. The limited number of interviews that were conducted by telephone were transcribed rather than tape-recorded.

3 These narratives have been prepared using the coverage of each incident as provided by *The Globe and Mail, The Ottawa Citizen,* and *The Toronto Star.*

4 Charles E. Osgood, George J. Suci, and Percy H. Tannenbaum, *The Measurement of Meaning* (Urbana: University of Illinois Press, 1957).

5 The following tables indicate the total average paid circulation in Ontario over the last decade of the three newspapers utilized in this analysis.

The Toronto Globe and Mail

Total Average Paid Circulation, Province of Ontario for 12 months ending:

	Morning, Monday to Friday
September 30, 1975	242,209
September 30, 1974	255,792
September 30, 1973	256,361
September 30, 1972	259,090
September 30, 1971	254,403
September 30, 1970	256,862
September 30, 1969	254,300
September 30, 1968	247,598
September 30, 1967	237,413
September 30, 1966	225,636

Source: Audit Bureau of Circulations, *Audit Reports.*

The Ottawa Citizen

Total Average Paid Circulation, Province of Ontario for 12 months ending:

	Evening, Monday to Friday
March 31, 1975	81,095
March 31, 1974	83,619
March 31, 1973	81,333
March 31, 1972	78,958
March 31, 1971	74,927
March 31, 1970	74,631
March 31, 1969	74,779
March 31, 1968	70,264
March 31, 1967	70,335
March 31, 1966	68,470

Source: Audit Bureau of Circulations, *Audit Reports.*

The Toronto Star

Total Average Paid Circulation, Province of Ontario for 12 months ending:

	Evening, Monday to Friday
September 30, 1975	482,916
September 30, 1974	501,323
September 30, 1973	508,048
September 30, 1972 (11 months)	505,482
September 30, 1971	376,932
September 31, 1970	374,729
September 30, 1969	367,267
September 30, 1968	360,931
September 30, 1967	351,159
September 30, 1966	346,240

Source: Audit Bureau of Circulations, *Audit Reports.*

6 It should be noted that the date next to each heading is that of the first reporting day rather than the date of the actual incident.

7 A number of analysts have suggested the existence of an almost mathematical relationship between distance and news coverage.

8 *Report of the Royal Commission of Inquiry in Relation to the Conduct of the Public and the Metropolitan Toronto Police,* June 5, 1972, pp. 66-67.

9 Communication from Cliff Lonsdale, Chief News Editor, Television, Canadian Broadcasting Corporation, November 8, 1976.

10 Guidelines with respect to the release of information to the news media can be found in by-law no. 22, *Regulations Regarding the Government of the Metropolitan Toronto Police Force,* Section 453.

Chapter Five

1 Daniel Walker, *Rights in Conflict: Chicago's 7 Brutal Days,* A Report to the National Commission on the Causes and Prevention of Violence (New York: Bantam Books, 1968), p. 193.

2 D. L. Lange, R. K. Baker, and S. J. Ball, *Mass Media and Violence,* A Staff Report to the National Commission on the Causes and Prevention of Violence, vol. 9 (Washington D.C.: U.S. Government Printing Office, 1969), p. 381.

3 All of these methods were harmful in the case of the 1965 Watts riot, see Lange, Baker, and Ball, op. cit., p. 104.

4 The American evidence is contradictory. Walker, op. cit., maintains there was staged news while Lange, Baker, and Ball, op. cit., p. 159, dismisses the charge.

5 Lange, Baker, and Ball, op. cit., Chapter 6.

6 "News of the 1943 Detroit race riot was censored because of war. Yet, Negroes in rural Mississippi, 700 miles away, received news of the event one day later from Pullman car porters on the Illinois Central Railway," cited in Lange, Baker, and Ball, op. cit., p. 115, from Ben H. Bagdikan, "Editorial Responsibility in Times of Urban Disorder", *The Media and the Cities,* ed. Charles U. Daly (Chicago: University of Chicago Press, 1968), p. 17.

7 Louis J. Hector, Paul L. E. Helliwell et al., *Miami Report: The Report of the Miami Study Team on Civil Disturbances in Miami, Florida During the Week of August 5, 1968*, A Report Submitted to the National Commission on the Causes and Prevention of Violence (Washington, D.C.: U.S. Government Printing Office, 1969), p. 11.

8 Lange, Baker, and Ball, op. cit., p. 114.

9 Reported in Lange, Baker, and Ball, op. cit., p. 96.

10 This charge against the press in Canada has also been made by Phyllis Wilson, "The Nature of News", *Journalism, Communication and the Law*, ed. G. Stuart Adam (Scarborough, Ontario: Prentice-Hall, 1976), pp. 23-34.

11 Lange, Baker, and Ball, op. cit., p. 95.

Appendix A

List of Reported Collective Violence Events: The Globe and Mail – January 1, 1965, to December 31, 1975

	Date	Locale	Description
1.	March 7, 1965	Toronto	University of Toronto Fraternity versus police
2.	March 10, 1965	Toronto	University of Toronto students' civil rights demonstration
3.	March 12, 1965	Toronto	Civil rights demonstration
4.	March 16, 1965	Toronto	Civil rights demonstration
5.	May 16, 1965	Toronto	Anti-Semitic rally
6.*	May 30, 1965	Toronto	Nazi demonstration
7.	September 19, 1965	Toronto	New City Hall riot
8.	October 9, 1965	Kitchener	Teamsters' strike
9.	February 10, 1966	Toronto/ Brantford	Teamsters' strike
10.	February 21, 1966	Brantford	Teamsters' strike
11.	February 22, 1966	Peterborough	Textile workers strike
12.	February 28, 1966	Toronto	Subway vandalism
13.	February 28, 1966	Toronto	Teamsters' strike
14.	March 18, 1966	Sudbury	School maintenance strike
15.	March 26, 1966	Ottawa	Anti-Vietnam war demonstration
16.	May 22, 1966	Wasaga Beach	Motorcycle gang violence
17.	May 29, 1966	Toronto	Juvenile violence
18.	July 15, 1966	Sudbury	INCO strike
19.	August 6, 1966	Hamilton	Stelco strike
20.	September 4, 1966	Grand Bend	Juvenile violence
21.	May 24, 1967	Ottawa	Farmers' demonstration
22.	June 18, 1967	Toronto	Soccer riot
23.*	August 20, 1967	Yorkville Toronto	Yorkville hippie riots
24.	August 23, 1967	London	Steelworkers' strike
25.	November 7, 1967	Ottawa	Anti-Bolshevik demonstration
26.	November 20, 1967	Toronto	Anti-Dow Chemical demonstration
27.	December 13, 1967	Toronto	Anti-Dow Chemical demonstration
28.	January 18, 1968	Toronto	Anti-Vietnam war demonstration
29.	April 14, 1968	Campbellford	Atwater arrest riot
30.	April 27, 1968	Toronto	Anti-Vietnam war demonstration
31.	June 13, 1968	Toronto	Goodyear strike
32.	July 2, 1968	London	Street festival riot
33.	July 10, 1968	Toronto	Dr. Spock demonstration
34.	July 12, 1968	Toronto	Johnson arrest incident
35.	July 28, 1968	Ridgeway	Beach dispute
36.	August 6, 1968	Wallaceburg	Plastic strike
37.	October 28, 1968	Toronto	Anti-Vietnam war demonstration
38.	November 5, 1968	Peterborough	Newspaper workers' strike
39.	November 29, 1968	Peterborough	Newspaper workers' strike
40.	December 5, 1968	Peterborough	Newspaper workers' strike
41.	July 12, 1969	Crystal Beach	Juvenile violence
42.	July 18, 1969	Toronto	Black versus Portuguese riot
43.	July 20, 1969	Niagara Falls	Motorcycle gang
44.	July 20, 1969	Port Colborne	Private beach dispute
45.	August 22, 1969	Ottawa	Anti-Soviet demonstration
46.	October 12, 1969.	Toronto	Repression in Quebec rally
47.	October 28, 1969	Seaforth	Motorcycle gang
48.	November 15, 1969	Toronto	Anti-Vietnam war demonstration
49.	February 28, 1969	Ottawa	Anti-Vietnam war demonstration
50.	April 2, 1970	Toronto	Dunlop Tire rally
51.	April 4, 1970	Toronto	Anti-Lenin rally
52.	April 18, 1970	Ottawa	Anti-Vietnam war demonstration
53.*	May 5, 1970	Toronto	Kent State demonstration
54.*	May 9, 1970	Toronto	Kent State demonstration
55.	June 9, 1970	Chatham	Motor Wheel Industries
56.	June 19, 1970	Toronto	Potters' strike
57.	June 22, 1970	Toronto	Edmund Burke Society versus William Kunsler

Date	Locale	Description
58. June 27, 1970	Toronto	Rock Concert
59. July 10, 1970	Toronto	Ontario Hydro sit-in
60. August 15, 1970	Toronto	RCMP drug raid
61. September 11, 1970	Toronto	RCMP drug raid
62. September 20, 1970	Toronto	Pro-P.L.O. rally
63. October 31, 1970	Toronto	Anti-Vietnam war protest
64. March 3, 1971	Toronto	Anti-Trudeau rally
65. March 28, 1971	Toronto	Edmund Burke Society
66. May, 5, 1971	Kitchener	Raymond's Snack Food
67. May 27, 1971	Toronto	Drug Raid
68. June 25, 1971	Hamilton	Dominion Glass
69. July 11, 1971	Toronto	Edmund Burke Society in Chinatown
70. July 12, 1971	St. Catharines	Kimberly Clark strike
71. July 18, 1971	Toronto	University of Toronto tent community
72. July 18, 1971	Toronto	Pro-Pakistan rally
73. July 29, 1971	St. Catharines	Kimberly Clark strike
74. August 11, 1971	Ottawa	Garbage Workers' strike
75.*August 25, 1971	Brantford	Canadian Textile Workers (Texpack)
76. September 7, 1971	Brantford	Candaian Textile Workers
77. September 9, 1971	Brantford	Canadian Textile Workers
78. September 14, 1971	Brantford	Canadian Textile Workers
79. October 15, 1971	Rexdale	Canadian Textile Workers
80. October 16, 1971	Toronto	Anniversary of War Measures Act
81.*October 25, 1971	Toronto	Anti-Kosygin demonstration
82. November 3, 1971	Toronto	Anti-Amchitka demonstration
83. November 6, 1971	Windsor	Anti-Amchitka demonstration
84. November 9, 1971	Oshawa	Duplate Canada picket-line
85. November 24, 1971	Toronto	Douglas Aircraft strike
86. November 28, 1971	Toronto	Anti-Tito demonstration
87. December 3, 1971	Toronto	Douglas Aircraft
88. March 12, 1972	Toronto	University of Toronto library incident
89. March 21, 1972	Toronto	Occupation of Simcoe Hall, University of Toronto
90. March 23, 1972	Waterloo	Anti-Trudeau rally
91. April 19, 1972	Toronto	Metro garbage strike
92. July 6, 1972	Kitchener	Dare Foods strike
93. July 6, 1972	Toronto	Bleecker St. tenants' eviction
94. July 8, 1972	Hamilton	Juvenile violence
95. July 10, 1972	Kitchener	Dare Foods strike
96. August 25, 1972	Toronto	Greenwood Raceway
97. September 4, 1972	Toronto	Canada-Russian hockey game incident
98. September10, 1972	Brantford	Six Nations festival
99. September 13, 1972	Toronto	Western Guard meeting
100. September 15, 1972	Toronto	Kraus Transport
101. October 1, 1972	Sarnia	Bar brawl
102. February 10, 1973	Kitchener	Bar brawl
103. February 18, 1973	Toronto	Cops Are Tops rally
104. July 21, 1973	Toronto	Consumer Glass
105. July 29, 1973	Toronto	Western Guard celebrates Mussolini's birthday
106. August 22, 1973	Toronto	Workmen's Compensation Board demonstration
107. August 30, 1973	Ottawa	Railway workers' demonstration
108. September 6, 1973	Toronto	Canadian Textile and Chemical Workers
109. October 15, 1973	Sarnia	Chemical workers
110. October 16, 1973	Toronto	Canadian Textile and Chemical Workers
111. November 14, 1973	Toronto	Canadian Textile and Chemical Workers
112. November 29, 1973	Toronto	Canadian Textile and Chemical Workers
113. March 28, 1974	Toronto	S.D.S. disturbance, University of Toronto
114. April 7, 1974	Toronto	Racial disturbance, University of Toronto
115. April 23, 1974	Toronto	Postal strike disturbance
116. April 29, 1974	Mississauga Toronto	Teamster picket-line
117. June 13, 1974	Toronto	Stop Banfield demonstration
118. August 10, 1974	Parry Sound	RCMP drug raid

119.	August 28, 1974	Chatham	Picket-line disruption
120.	September 7, 1974	London	Wonder Bread disturbance
121.*	September 30, 1974	Ottawa	Indian demonstration on Parliament Hill
122.	October 15, 1974	St. Catharines	Eaton-Yale picket-line disturbance
123.	October 19, 1974	Toronto	Rochdale drug raid
124.	October 19, 1974	Oakville	Bar brawl
125.	May 17-18, 1975	Sable Beach	Campers battle police
126.	July 13, 1975	Toronto	Soccer fight
127.	September 23, 1975	Thunder Bay	Paper workers' picket-line
128.	November 24, 1975	Wallaceburg	Hotel incident
129.	December 2, 1975	Toronto	Postal strike disturbance

* identifies the six acts of collective violence that were investigated in depth (case studies).

Appendix B

List of Reported Individual Political Violence: The Globe and Mail – January 1, 1965, to December 31, 1975

Date	Locale	Description
1. May 18, 1966	Ottawa	Bomb at Parliament
2. September 22, 1966	Ottawa	Bombing of Cuban embassy
3. January 29, 1967	Ottawa	Bombing of Yugoslavian embassy
January 29, 1967	Toronto	Bombing of Yugoslavian consulate
4. December 31, 1968	Ottawa	Bombing, near National Film Board
5. January 2, 1969	Ottawa	Bombs found in three mailboxes
6. June 24, 1970	Ottawa	Bombing at National Defence Headquarters
7.*October 18, 1971	Ottawa	Attack on Premier Kosygin of the USSR
8. December 26, 1971	Toronto	Air Canada plane hijacked to Cuba
9. September 20, 1972	Ottawa	Letter-bombs sent to Israeli embassy

* identifies the act of individual violence that was investigated in depth (case study).

Appendix C

Coding Sheets for Random Sample

Theme Frequency — Front-Page Articles

Political violence	*Article*	*Photograph*
Ontario	_____	_____
Canada	_____	_____
International	_____	_____
War and defence news	_____	_____
Crime news	_____	_____
Accident and disaster	_____	_____
Popular amusement	_____	_____
Human interest	_____	_____
Economic activity	_____	_____
Politics and government	_____	_____
Education and arts	_____	_____
Other	_____	_____

           Number of articles on page _____

           Number of photographs on page _____

Volume Analysis — Front-Page Articles*

Political violence	_____	_____
Ontario	_____	_____
Canada	_____	_____
International	_____	_____
War and defence news	_____	_____
Crime news	_____	_____
Accident and disaster	_____	_____
Popular amusement	_____	_____
Human interest	_____	_____
Economic activity	_____	_____
Politics and government	_____	_____
Education and arts	_____	_____
Other	_____	_____

* Volume is expressed in square inches.

Front-Page Placement

The location of articles dealing with political violence are noted as to quadrant.
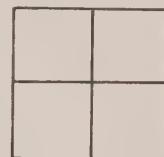
Ontario

Canada (except Ontario)

International (except Canada)

Appendix D

Coding Sheet for Collective Violence Events

1. *Date of violent event:* This means the day that the event broke out. Any violent event that overlaps the 24-hour limit and extends for more than one day in a particular locality will still be considered one event. If, however, there is a 24-hour gap, requiring remobilization of coercive and insurgent elements, then the incident becomes a separate entity.

2. *Locality and province where event occurred*: This should be indicated for each separate locality unless they form the same continuous metropolitan area, because each case consists of a day/town unit of analysis.

3. *Duration of collective violence*: Coded on a scale of geometric progression whose first two intervals are "one-half day or less", "one day", et cetera.

4. *Precipitating incident that unleashed the violence*: Any fortuitous event or occasion, such as disorderly behaviour by a few demonstrators or excessive zeal by police, that brings about a confrontation. State the issue that caused the mobilization as well.

5. *Estimated number of participants*: These will most probably be very rough estimates. Give all figures as well as sources, and place the most probable ones in parentheses.

6. *Estimated number of security forces, for example, military and police, et cetera.* See number (5).

7. *Names of organizations reportedly involved*: These are the organizations that sponsored the demonstrations or meeting. Give complete names as well as the areas they (or the affiliate) represent.

8. *Social status of participants*: Give their broad professional category, for example, workers-skilled, students, white-collar. Whenever possible, also include specific profession, for example, university student, plumber, et cetera.

9. *Primary targets of violence*: (a) Property targets such as public, private, foreign, or any property. (b) Political actors and public figures; military and police; private political groups; foreign public figures; any other political actors. (c) Non-political actors such as communal groups, economic groups, or a combination of these.

10. *Reported number of arrests*: See number (5).

11. *Reported number of participant casualties*: Number injured. See number (5).

12. *Security forces casualties*: See number (5).

13. *Estimated property damage*: See number (5).

14. *Other significant information:*

Appendix E

Coding Sheet for Media Evaluation of Collective Violence Events

Coder: _____

Newspaper: _____

Date of incident: _____

Is this the first report? _____

Subsequent report? _____

Date of first report: _____

Date of subsequent report: _____

Page number(s): _____

General description of event:

_____

_____

_____

Other information of relevance:

_____

_____

Source of information (that is, individual reporter, wire service, et cetera):

_____

1. Position
   (a) first-page headline story
   (b) first-page upper half
   (c) first-page lower half
   (d) story before editorial page, but after first page, that is, pages two to five
   (e) within first section after editorial page
   (f) first page of subsequent section
   (g) elsewhere

2. Volume of headline story (expressed in square inches)

3. Photographs
   (a) background
   (b) action

4. Position of photographs
   (a) front page upper half
   (b) front page lower half
   (c) after first page but before editorial page
   (d) within first section after editorial page
   (e) first page of second section
   (f) elsewhere

5. Volume of photographs (expressed in square inches)

6. Editorial section
   (a) editorial
       volume
   (b) cartoon
       volume

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Appendix F

Case-Studies Interview Questionnaires:
Participants, Media, Authorities

Questionnaire for *Participants*

Name:

Address:

1. What recommendations would you suggest that we make to the Royal Commission concerning media coverage of violent events?

2. Do you think that demonstrations in other parts of the world, which we frequently see on television, can have an impact on what goes on in Toronto?

3. Do you feel that the media provides a useful forum for the expression of political discontent?

4. Regarding the (particular case study), what do you feel was the principal issue at stake?

5. Could you briefly describe the sequence of events leading up to the incident and the aftermath?

6. Did you read *The Globe and Mail*'s coverage of the incident at the time? If not, did you follow the incident in any other newspaper?

7. How would you evaluate *The Globe and Mail*'s coverage of the incident? How would you evaluate any other newspaper's coverage of the incident?

8. If you followed television and radio coverage of the incident, how would you evaluate it?

9. In the coverage of the demonstration/strike, was there adequate discussion of the issues at stake?

10. Was there any sort of planning or dress-rehearsal for the demonstration? Was a demonstration permit issued?

11. Do you feel that your own personal role in the incident was objectively reported?

12. During the demonstration/strike, were you *aware* of the presence of the representatives of the media?

13. Do you feel that representatives of the news media were willing to hear your side of the incident when given the opportunity?

14. Did the reportage focus too strongly on the violent aspects of the incident?

15. Frequently, in any large confrontation, there may be a number of spurious rumours afloat. Did you see your role as dispelling such rumours?

16. Was there any sort of news embargo concerning this (particular case)?

17. Do you feel that you may have been manipulated by the press?

18. Was the confrontation worth-while in provoking constructive change, or at least an awareness of the problem on the part of the public?

19. Do you know if there exists any film or newsreel footage concerning this particular incident?

20. Do you have any general comments concerning the violence content of news reporting?

21. May we see you again if necessary?

21. In the coverage of the demonstration, was there adequate discussion of the principal issues at stake?

22. Do you feel that the media provides a useful forum for the expression of political discontent?

23. Did the reportage focus too strongly on the violent aspects of the incident?

24. Have you made any errors of judgment in handling a story in the last few years?

25. Do you know if there exists any film or newsreel footage concerning this particular incident?

26. Do you have any general comments concerning the violence content of news reporting?

27. May we see you again if necessary?

Questionnaire for *Media*

Name:

Address:

1. What recommendations would you suggest that we make to the Royal Commission concerning media coverage of violent events?

2. What constraints or guidelines, if any, govern the sort of reporting that you are able to do?

3. What is your most difficult task in reporting demonstrations/strikes?

4. At the scene of any major demonstration or strike, do policemen generally act as news sources about such basic information as numbers of demonstrators, arrests, et cetera? Or do reporters base their accounts on their own observations?

5. Do you think that demonstrations in other parts of the world, which we frequently see on television, can have an impact on what goes on in Toronto?

6. Are stories containing reports of violence more interesting to the reader?

7. Do you rely on other newsmen in obtaining information about stories you're writing?

8. Regarding stories that carry your byline, does the rewrite editor normally make any major revisions?

9. Regarding major stories, such as demonstrations and strikes, how thoroughly are you able to check the facts of a story before submitting your copy to the news editor?

10. How much of the average demonstrator's behaviour is due to the presence of the media on the scene?

11. Do you feel that there is sufficient follow-up on such stories to adequately inform the public?

12. In your coverage of demonstrations and strikes, do you feel that you may at times have been manipulated by the police or the militants?

13. Frequently, in any large confrontation, there may be a number of spurious rumours afloat. Do you see your job as dispelling such misleading stories?

14. Can you tell me some specifics about the news organization of *The Globe and Mail?*

15. Regarding the (particular case study), what do you feel was the principal issue at stake?

16. Could you briefly describe the sequence of events leading up to the incident and the aftermath?

17. How would you rate *The Globe and Mail*'s over-all coverage of the incident?

18. If you followed television and radio coverage of the incident, how would you evaluate it?

19. Was there any sort of news embargo concerning this (particular case)?

20. How good a job did the police do in handling the incident?

Questionnaire for *Authorities*

Name:

Address:

1. What recommendations would you suggest that we make to the Royal Commission concerning media coverage of violent events?

2. Are there any sort of guidelines (city or provincial) concerning the sharing of information with news reporters? What constraints do policemen, as well as news reporters, have in dealing with violent demonstrations and strikes?

3. At the scene of any major demonstration or strike, do policemen generally act as news sources about such basic information as numbers of demonstrators, arrests, et cetera? Or do reporters base their accounts on their own observations?

4. Do you think that demonstrations in other parts of the world, which we frequently see on television, can have an impact on what goes on in Toronto?

5. Frequently, in any large confrontation, there may be a number of spurious rumours afloat. Do you see your job as dispelling such misleading stories?

6. Is there a body of law that relates specifically to demonstrations? From a legal point of view, what is your responsiblity in dealing with such situations?

7. How much of the average demonstrator's behaviour is due to the presence of the media?

8. Is police training adequate to deal with demonstrations that erupt into violence?

9. Does the presence of the news media make the police's job more difficult? Is media equipment on the scene such as cameras, strobe lights, recording devices, et cetera, a hindrance to you in the performance of your duties?

10. Do you feel that the media provides a useful forum for the expression of political discontent?

11. Regarding the (particular case study), what do you feel was the principal issue at stake?

12. Could you briefly describe the sequence of events leading up to the incident and the aftermath?

13. Did you read *The Globe and Mail*'s coverage of the incident at the time? If not, did you follow the incident in any other newspapers?

14. How would you evaluate *The Globe and Mail*'s coverage of the incident? How would you evaluate any other newspaper's coverage of the incident?

15. If you followed television and radio coverage of the incident, how would you evaluate it?

16. Did the reportage focus too strongly on the violent aspects of the incident?

17. Was there any sort of planning or dress-rehearsal for the demonstration as far as you could tell? Was a demonstration permit issued?

18. Was there any sort of news embargo concerning this (particular case)?

19. Overall, how good a job did the media do in covering this (particular case)?

20. Have you made any errors of judgment in dealing with such an incident in the last few years?

21. Do you know if there exists any film or newsreel footage concerning this particular incident?

22. Do you have any general comments concerning the violence content of news reporting?

23. May we see you again if necessary?

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